NOV - 8 1948

PER. SECT.

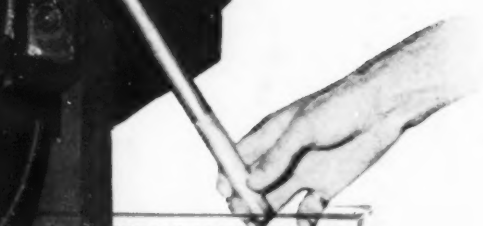
Textile Industries

NOVEMBER, 1948

formerly
COTTON
Textile Industries

CONTENTS, PAGE 3 ADV. INDEX, PAGES 277, 279 and 281

ESSENTIAL FOR WOOD BOBBINS —A MUST FOR PAPER TUBES



LIBRARY OF CONGRESS
SERIALS DIVISION
NOV 9 1948
RECEIVED

PRECISION GEAR & MACHINE CO.

Announces the

bobbin lifter

IT STOPPED THE SHOW AT GREENVILLE! After 18 months' experimenting, Precision introduces a perfected bobbin lifter that ends bent spindles, damaged yarn and skinned knuckles. Inexpensive and simply installed, the Precision bobbin lifter loosens bobbins at the flick of a lever. Lightens burden on doffer, speeds up doffing. Leading mills are already praising it. Wire or phone for details of this *exclusive* Precision development.

PRECISION

GEAR & MACHINE COMPANY

The South's Largest Manufacturer of Gears and Chain Drives

700 NORTH TRYON ST., CHARLOTTE, N. C. TELEPHONE 4-1851

NOV - 8 1948

A Complete Financial Service

COMMERCIAL FACTORS CORPORATION

Fred'k Vietor & Achelis, Inc. Established 1828

Schefer, Schramm & Vogel Established 1838

Peierls, Buhler & Co., Inc. Established 1893

TWO PARK AVENUE, NEW YORK, 16

EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON 10, MASS.
T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA

TEXTILE INDUSTRIES is published monthly at 116 E. Crawford St., Dalton, Ga., by W. R. C. Smith Publishing Company, Dalton and Atlanta, Ga., U. S. A.
Executive and Editorial Offices: Grant Bldg., Atlanta 3, Ga.
Subscription Rates, United States and Possessions, $2.00 for one year; Canada, South America, Central America, $2.00 per year; Foreign Countries, $5.00 per year.
Entered as second-class matter at the Post Office, Dalton, Ga., under the Act of March 3, 1879.

Volume 112 Number 11

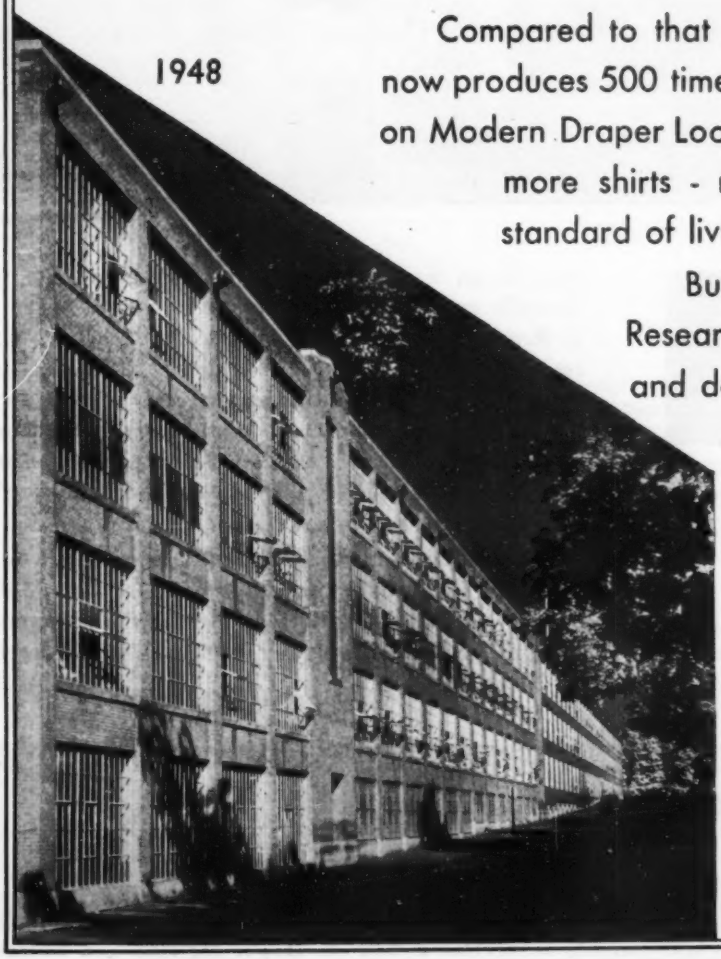
DRAPER Research

1841

Has made this expansion possible for us.

Think, too, what it has meant to you. 1816 saw 36-inch goods being woven on power looms operated one per Weaver at around 60 picks per minute. Then Ira Draper's invention of the Revolving Temple doubled existing loom production — the start of Draper Research.

1948



Compared to that day, a Weaver now produces 500 times as much cloth on Modern Draper Looms! More jobs - more shirts - more dresses - a better standard of living.

But the work of carrying Draper Research on is not completed. It must and does continue along these lines.

Improving the mechanisms of older loom models.

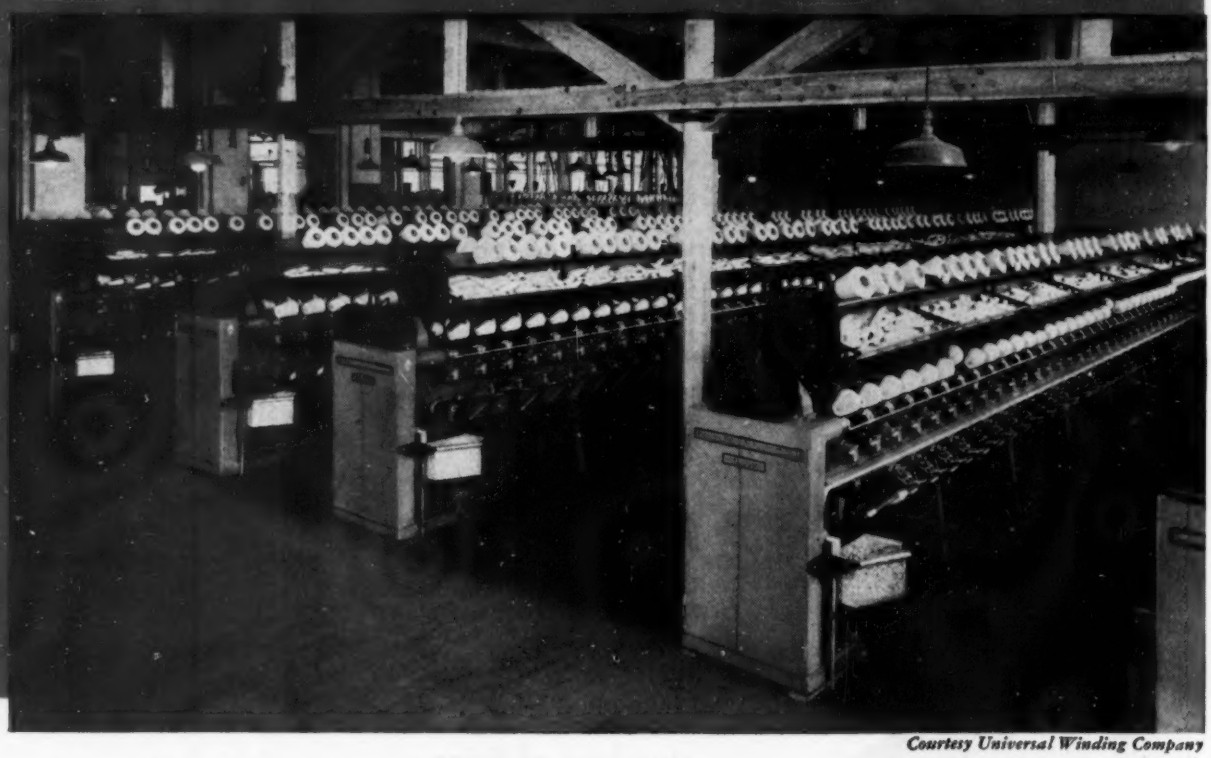
Constant betterment of high speed models.

New types of looms.

Other fabric making machines.

Draper Corporation

1 way to reduce 3 costs



Courtesy Universal Winding Company

Lubricate anti-friction bearings with Texaco Regal Starfak No. 2

WHEN you protect grease-lubricated ball and roller bearings with *Texaco Regal Starfak No. 2,* you will . . .

1. *Reduce maintenance costs:* Bearings require less servicing, fewer replacements are necessary, time between scheduled overhauls can be extended. *Texaco Regal Starfak No. 2* remains stable even under severe conditions, resists oxidation and gum formation, is virtually unaffected by temperature changes.
2. *Reduce lubrication costs: Texaco Regal Starfak No. 2* resists leakage, separation, washout. Thus, it lasts longer, fewer applications are needed.
3. *Reduce production costs:* Machines can operate faster, fewer repairs are needed. Power consumption is less, too. *Texaco Regal Starfak No. 2* reduces "drag" in starting and running.

Let a Texaco Lubrication Engineer help with *all* your lubrication. Just call the nearest of the more than 2300 Texaco Wholesale Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

TEXACO

TEXACO Lubricants

FOR THE TEXTILE INDUSTRY

Tune in...Texaco Star Theatre every Wednesday night starring Milton Berle. See newspaper for time and station

Volume 112, Number 11

Textile Industries

November, 1948

Contents

FEATURES

MODERN EQUIPMENT & PROCESSING REVIEW 91
(A Special Section)

Again We Prepare for War ---- 79
Installation of Individual Drives (Exposition) ---- 83
Filament Rayon Finishing Plant (Colonial Mills) ---- 86
Preventing Roving From Unwinding ---- 88
Magnets Protect Textile Machines ---- 89
Stop Motion for Circular Machines ---- 194
Southern Hosiery Men Meet in Augusta ---- 197
Public Relations and Employee Training (Northern N. C.-Va. STA Meet) ---- 207
Winding Machines, Principles and Practices, No. 14 ---- 209
Greenville Show Was a Success ---- 215

GENERAL and TECHNICAL

Coating for Bale Ties to be Tested ---- 85
No Cotton Marketing Quotas on '49 Crop ---- 230
German Cotton Goods Reach U. S. A. ---- 230
Action Requested on International Textile Standards ---- 230
Earnings in Cotton Goods Industry ---- 233
Tell Your Employees ---- 235
Expanded Cotton Use Seen in Shoe Industry ---- 235
Textiles from Peanuts ---- 235
AATCC Seeks Research Funds ---- 237
Import Restrictions Placed on Textile Commodities by Cuba ---- 237
USDA Spinning Tests on 1948 Cotton Crop ---- 255
Alabama Cotton Manufacturers Convene ---- 271

HOW OTHER MEN MANAGE

Moving Lease Rods Helps Sticky Warps ---- 217
More Comments on Variation in Roving Weights ---- 217
Steam Utilized to Stir Size ---- 219
How to Estimate the Length of a Coil of Card Clothing ---- 221
Bobbin Truck Aids in Reducing Waste ---- 221

KNITTING SECTION

Modern Equipment & Processing Review ---- 177
Stop Motion for Circular Machines ---- 194
Southern Hosiery Men Meet in Augusta ---- 197
Handy Tool for Changing Carrier Tubes ---- 199
England Tries Out New Nylon Finish Process ---- 201
Majority of Yarns Are in Easy Supply ---- 201
An Eye on the Knitting Mills ---- 203

DEPARTMENTS

Shorts and Remnants ---- 77
How Other Men Manage ---- 217
An Executive Views the News in Textiles ---- 223
Future Events ---- 229
News in Brief ---- 230
What the Textile Mills Are Doing ---- 239
An Old-Timer Says— ---- 251
Suppliers' News ---- 257
Personal Notes ---- 263
Free Booklet Section ---- 266-A

Payment for contributed articles is made upon acceptance, before publication.

"Textile Industries" has the largest circulation among the mills of the United States of any textile publication.

Maynard L. Durham
Business Manager
Cliff Rutland, Assistant
Business Representatives

ARTHUR C. SHAW, 11 Monroe Road, Wellesley Hills, Mass. (Wellesley 3648).

WILLIAM K. HOFFMAN, 26 Bowdoin St., Maplewood, N. J. (South Orange 2-2484).

L. E. ALLEN, Madison-LaSalle Bldg., 173 West Madison St., Chicago, Illinois (Franklin 2086).

A. E. C. SMITH, 402 Swetland Bldg., P. O. Box 3054, Cleveland 17, Ohio (Cherry 7352).

J. D. PARSONS, 63 Barker St., Buffalo 9, N. Y. (Garfield 5532).

W. A. MCGEE, Box 562, Charlotte, North Carolina (3-4932).

LOYD B. CHAPPELL, Auditorium Bldg., 427 West 5th St., Los Angeles, California (Michigan 9849).

John C. Fonville
Editor

ASSOCIATES
J. Frank Guest
Milton C. May
G. M. Carby
Hunter R. Hughes (Charlotte, N. C.)
Paul M. Platzman (New York)

CONSULTING EDITORS
F. Gordon Cobb
Ben H. Crawford

J. A. Moody
Production Manager

ANNUAL SUBSCRIPTION
U. S., CANADA, PAN-AMERICA—$2.00
FOREIGN—$5.00

Published Monthly at 115 E. Gordon, Dalton, Ga.

By W. R. C. SMITH PUB. CO.

Editorial and Executive Offices
806 Peachtree St., N.E., Atlanta 5, Ga.

Who Also Publish

ELECTRICAL SOUTH
SOUTHERN HARDWARE
SOUTHERN POWER AND INDUSTRY
SOUTHERN AUTOMOTIVE JOURNAL
SOUTHERN BUILDING SUPPLIES

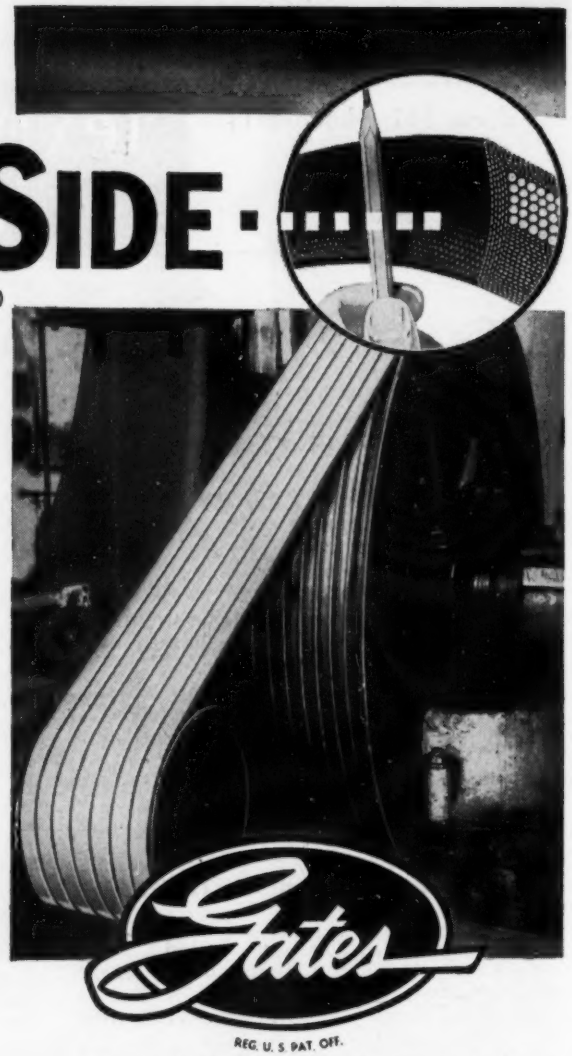
W. J. ROOKE, *Pres.*; R. P. SMITH, *Exec. V. P.*; T. W. MCALLISTER, *V. P.*; E. W. O'BRIEN, *V. P.*; A. E. C. SMITH, *V. P.*; O. A. SHARPLESS, *Treas.*; A. F. ROBERTS, *Sec.*; S. J. JONES, *Asst. Treas.*

Copyright, 1948, by W. R. C. Smith Publishing Company

Here is **WHY** the

CONCAVE SIDE

(U. S. PATENT NO. 1813698)



The Mark of SPECIALIZED Research

SAVES You Many DOLLARS In V-BELT Costs!

Every time a V-Belt bends around its pulley, the *top* of the belt is under *tension* and grows *narrower*. The *body* of the belt is *compressed*—causing the *sides* to *bulge out!*

FIG. 1

Because of these stresses, any V-Belt built with straight sides is forced to assume, in the sheave groove, the shape shown in figure 1, on the left.

This forced bulging of a *straight-sided* V-Belt against the sheave groove walls naturally produces excessive wear along the *middle* of the belt's sides—as indicated by the arrows. Also, because the full side of the belt does not *uniformly* grip the pulley, there is a definite loss in drive efficiency.

Now see the difference when you bend the V-Belt that is built with the precisely engineered Concave Side (U. S. Patent No. 1813698)—the Gates Vulco Rope.

FIG. 2

As the Gates Vulco Rope bends, its Concave Side becomes straight (Figure 2). It exactly fits the sheave groove—and this gives you two very definite savings:—

(1) No out-bulge of the sides means uniform side-wall wear—*longer life!*

(2) *Full side-width* grip on the pulley carries heavier loads and sudden load increases without slippage—saving your belts and saving power too!

The Concave Side is MORE IMPORTANT NOW Than Ever Before!

Because the *sides* of a V-Belt are what actually *drive* the pulley, it is clear that any increased load on the belt means a heavier load that must be transmitted to the pulley *directly* through the belt's sidewalls.

Now that Gates SPECIALIZED Research has made available to you *SUPER* Vulco Ropes —carrying fully 40% higher horsepower ratings —the life-prolonging Concave Side naturally delivers greater savings today than ever before.

4810

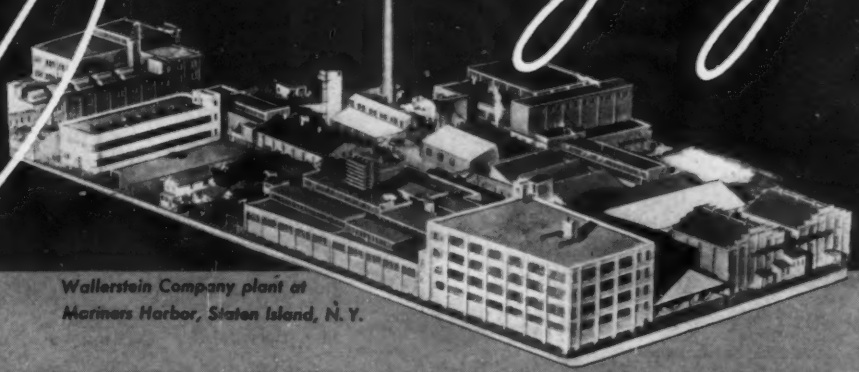
GATES VULCO ROPE DRIVES

Engineering Offices and Jobber Stocks IN ALL INDUSTRIAL CENTERS of the U. S. and 71 Foreign Countries

THE GATES RUBBER COMPANY
DENVER, U.S.A.
"The World's Largest Makers of V-Belts"

RAPIDASE

for de-sizing



Wallerstein Company plant at
Mariners Harbor, Staten Island, N. Y.

SPEEDS PRODUCTION

WITH HIGHER DE-SIZING TEMPERATURES

IS AND ALWAYS HAS BEEN—

HEAT RESISTANT

RAPID IN DE-SIZING

LIQUID —— CONVENIENT

DE-SIZE FASTER AT LOWER COST WITH RAPIDASE

Technicians available • Write for Booklet

WALLERSTEIN COMPANY, INC. • 180 MADISON AVENUE • NEW YORK 16, N. Y.

75%-90% ANNUAL RETURN

on your INVESTMENT in the

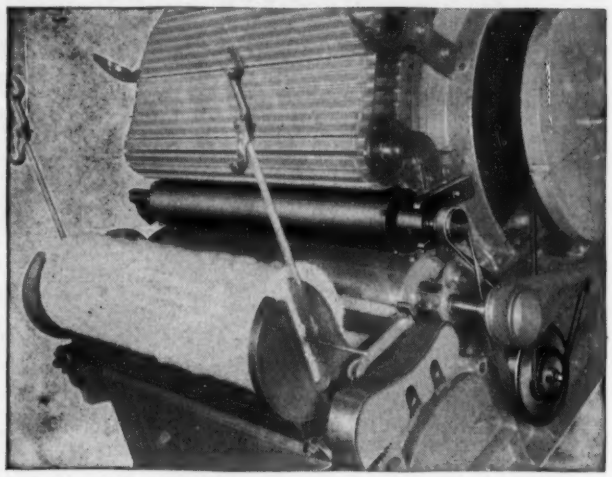
SACO-LOWELL

Continuous Card Stripper

Revealing statistics, available through

Waste Reports
Production Records
Cost account . . . and
Balance Sheet

all show that the Saco-Lowell Continuous Stripper earns from 75% to 90% *annually* on a two-shift 80-hour basis!



The Saco-Lowell Continuous Stripper can be applied to practically all Revolving Flat Cards — with equally good results.

Here are a few of its PRODUCTION ADVANTAGES

- It is easy to install
- Operates without added cost
- Recovers up to 2% additional fibre
- Reduces waste, nep count and lost production
- It makes a cleaner and more uniform sliver

Please note:

The Continuous Stripper yields the same important results, even though your card room may be equipped with vacuum or other type strippers, since those other installations do not reduce waste, nep count, or lost production — nor do they prevent loading of the cylinder with impacted waste.

Engineer available: Would you like to have one of our engineers discuss this subject with you? A letter or telephone call to our nearest Sales Office will bring prompt response — without the slightest obligation to you, of course.

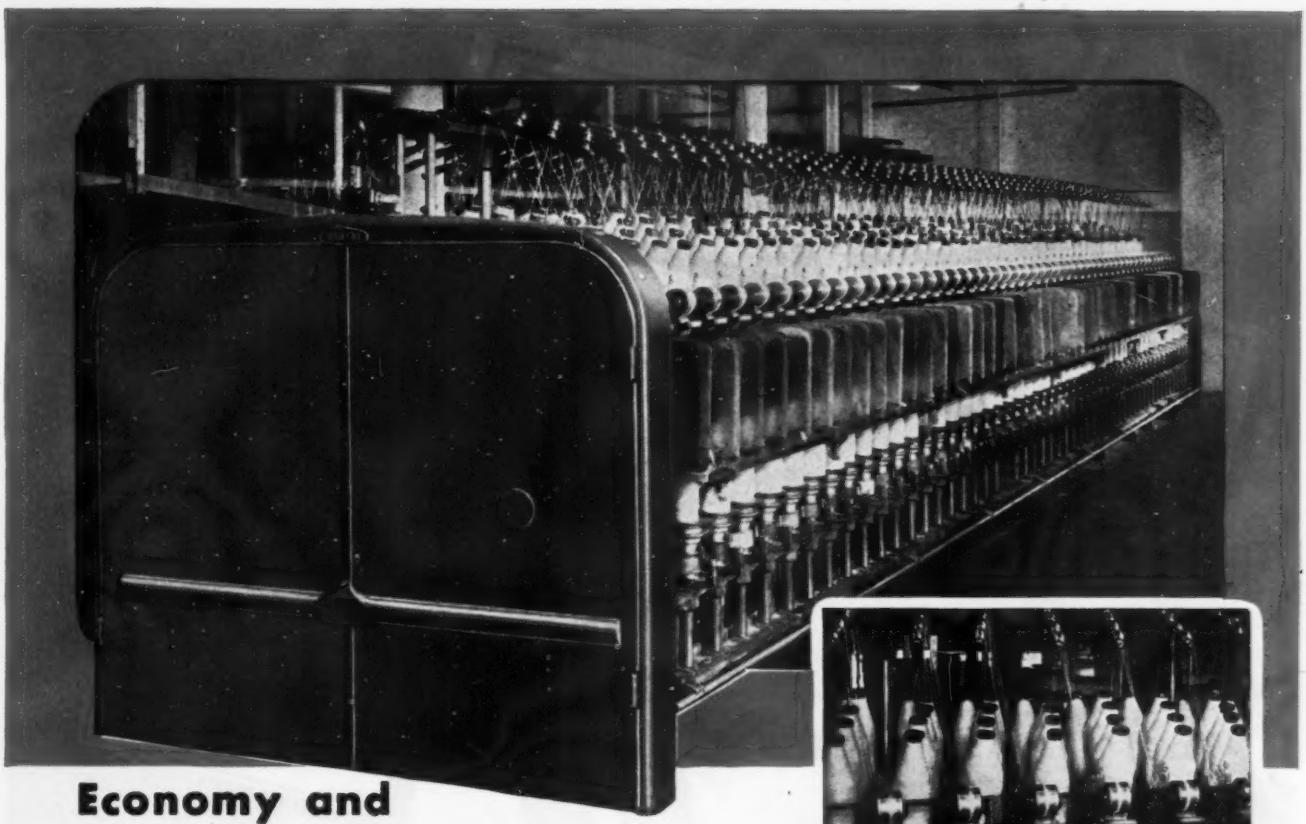
A special catalog giving technical and engineering data will be sent promptly on request . . . write our nearest office.

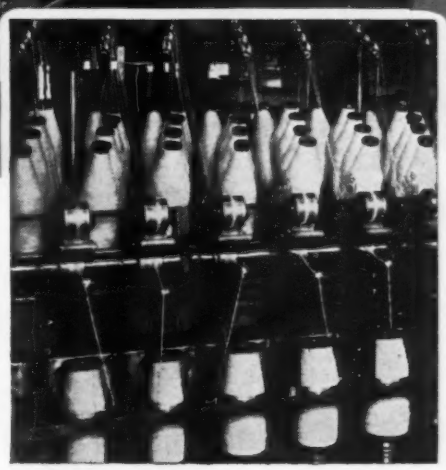
SACO-LOWELL

60 BATTERYMARCH STREET, BOSTON 10, MASS.

Shops at BIDDEFORD, MAINE

SALES OFFICES: CHARLOTTE • GREENVILLE • ATLANTA





Economy and Ease of Operation Feature the

WHITIN Model "K"

Selective Type Trap Twister

For modern large package twisting, more and more of today's Woolen and Worsted mills — particularly carpet and papermakers' felt mills — are using Whitin Model "K" selective type Trap Twisters with marked success, both from the standpoint of economy and ease of operation.

These 7½" gauge twisters have individual control on each component yarn, resulting in all knots being in the single yarn, thereby eliminating ply knots. The two spindle 2" tape drive assures positive and uniform twists. Ample creel space is provided for the twisting of 2, 3 and 4 ply yarns from cops, mule and frame bobbins. 6" rings and 9¾" traverse produce a twister spool holding from 36 to 42 ounces of yarn depending on the number of plies and turns of twist.

The Model "K" Twister has special auto-lubricated rings which assures long life to rings and travelers at high spindle speeds. The sturdy ring rail is vibration-free and the whole machine is built low, permitting easy access to the creel by the operative.

Photos Courtesy of Alexander Smith & Sons Carpet Co., Yonkers, N. Y.

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS
CHARLOTTE, N. C. • ATLANTA, GA.

These Major Merchandisers of TERRY TOWELING all weave their Fine Fabrics on C&K LOOMS

Beachwear and towels of luxuriant terry have to live a strenuous life...yet come up fresh, soft and smiling from limitless launderings. And national advertising demonstrates the confidence of these 7 mills that their brands of terry will do exactly that.

Such confidence can be based only on finest yarns, most careful preparation, and most efficient weaving machinery . . . C&K Looms. So wherever you see one of the famous trademarks above, remember that it's backed by C&K's *invisible* trademark — a basic assurance of quality in woven fabrics. Yes, mills that weave any type of fabrics on C&K Looms have long been known for dependability in quality, delivery, and price. And that's exactly why so many different types of cloth are woven on Crompton & Knowles Looms.

Crompton & Knowles Loom Works

WORCESTER 1, MASSACHUSETTS, U. S. A.

PHILADELPHIA, PA. • CHARLOTTE, N. C. • ALLENTOWN, PA.
CROMPTON & KNOWLES JACQUARD & SUPPLY CO., PAWTUCKET, R. I.

C&K — Loom the Leaders of Woven Fabrics

This "Invisible Trademark" Stands Back of the Famous Trademarks Shown above

A useful guide to better results with Stainless

Here in convenient form we have condensed the essential facts about the various grades of U·S·S Stainless Steel that will assist you in determining broadly which is most suitable for your needs. Keep in mind, however, that this chart merely indicates general characteristics and basic applications.

To get *optimum* results from these service-tested Stainless Steels, any fabricator, and especially any one contemplating the use of Stainless for a new product, should obtain expert advice in its selection and fabrication. This we are prepared to furnish.

Our Stainless engineers are specialists in the use of these materials. Ask for their cooperation. You'll find their suggestions practical and extremely helpful not only in determining the grade of U·S·S Stainless that will do the best job for you, but in showing how it can be handled most efficiently on your equipment.

15 types of U·S·S Stainless Steel to choose from

	grade	characteristics	when or why used
austenitic	U·S·S 18-8 Type 302	Excellent corrosion resistance.	General all-purpose grade for food, dairy, chemical, and architectural uses.
austenitic	U·S·S 18-8 S Type 304	Carbon is limited to 0.08% maximum.	For applications similar to U·S·S 18-8 Type 302, but offers superior corrosion resistance in weld-affected areas.
austenitic	U·S·S 18-8 Ti Type 321 U·S·S 18-8 Cb Type 347	Similar in general corrosion resistance to U·S·S 18-8 and U·S·S 18-8 S. Stabilizing additions immunize corrosion attack of heat-affected areas.	High temperature service, 800°F to 1600°F. For severe corrosion conditions in welded assemblies which cannot be subsequently annealed.
austenitic	U·S·S 18-8 Mo Type 316	Exceptional corrosion resistance, improved creep strength.	Severe corrosive conditions, particularly those involving pit-type corrosion.
austenitic	U·S·S 18-8 FM Type 303	Galling and seizing reduced greatly in machining.	Gears, valves, bolts, screws, or other machined products.
austenitic	U·S·S 25-12 Type 309	Exceptionally stress resistant at high temperature exposure.	In service where temperatures up to 1900°F are encountered.
austenitic	U·S·S 25-20 Type 310	Offers superior resistance to oxidation.	Applied where very high temperatures are involved.
ferritic	U·S·S 17 Type 430	Good corrosion resistance.	Automotive trim and interior architectural trim.
ferritic	U·S·S 27 Type 446	Limited formability, generally not adapted to severe drawing. Excellent scaling resistance.	Principally used at high temperatures up to 2000°F for static parts not subjected to high stress.
ferritic	U·S·S 12 Type 410	Martensitic grade, strengthened by conventional heating and quenching.	Engaging mechanical parts, such as pump rods and valves.
ferritic	U·S·S 12 Turbine Type 403	Composition basically same as U·S·S 12.	Modified analysis suited for turbine blades and similar application.
ferritic	U·S·S 12 AL Type 405	Composition basically same as U·S·S 12.	Modified analysis for applications requiring field welding where air-hardening cannot be corrected by heat treatment.
ferritic	U·S·S 12 FM	Added elements give extra machinability over U·S·S 12.	Used for valve parts and other articles made on automatic machines.
ferritic	U·S·S 5 Type 501	Welding hardens; annealing restores ductility.	Used in petroleum industries for strength, and resistance to corrosion and oxidation at moderately high temperatures.
ferritic	U·S·S 5 S Type 502	Basically same as regular U·S·S 5.	Modified analysis reduces tendency to weld-harden.

forms available

SHEETS are supplied in plain or polished finishes which are standardized. They are designated as: No. 1—Hot Rolled, Annealed, and Pickled; No. 2D—Dull Cold Rolled; No. 2B—Bright Cold Rolled; No. 4—Standard Polish on either One or Both Sides; No. 6—Tampico Brushed; No. 7—High Luster Polished.

STRIP is supplied to ordered requirement in coils or straightened and cut lengths. It should be ordered to a decimal thickness, with width and finish to suit the particular application.

PLATES AND BARS are furnished hot rolled, annealed, and pickled; bars are also furnished cold finished, centerless ground, or polished. Special sections and plates are furnished with pickle finish and require coarse abrasives in preliminary grinding, where a polish is desired.

TUBULAR PRODUCTS are furnished in most popular grades of U·S·S Stainless Steel. A variety of finishes are obtained by grinding and polishing cold drawn, annealed, and pickled tubing.

ROUND WIRE is available in coils within a size range of .5" to .005" inclusive. Straightened and cut material is limited to .030" and coarser. Finishes available include pickled, metallic coated, oil, diamond, and soap drawn, ground, and polished. A variety of cold heading wire, spring wire, weaving wire, armature binding wire, and wire rope are also available in stainless steels.

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH & CHICAGO
COLUMBIA STEEL COMPANY, SAN FRANCISCO · NATIONAL TUBE COMPANY, PITTSBURGH
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST
UNITED STATES STEEL EXPORT COMPANY, NEW YORK
S-1039

U·S·S STAINLESS STEEL

SHEETS · STRIP · PLATES · BARS · BILLETS · PIPE · TUBES · WIRE · SPECIAL SECTIONS

UNITED STATES STEEL

KILL STATIC with Complete Safety

STATIC in textile mill routine is a costly nuisance. To maintain trouble-free and smooth speed production, static must be eliminated continuously and safely. Since 1904, thousands of mills the world over have been eliminating static with CHAPMAN equipment — efficiently, with complete safety, and at low cost

Obviously, there can be no "package" solution for static problems. CHAPMAN Static Eliminators are of several types, each of which is specifically designed to do its one job, and to do that job superlatively well — to KILL STATIC — whether at a single point or across any width of web.

THE CHAPMAN STATIC ELIMINATOR

INSTANTANEOUS ACTION — TROUBLE-FREE

Textile mills everywhere report to us that CHAPMAN Static Eliminators are speeding their production by eliminating static at the point where static causes trouble; on the condensers of wool carding sets; over doffer combs; on Peralta machines, nappers, dryers; in the drawing process of making worsted type yarns on the American or modified cotton system; on cotton type drawing frames handling cotton or wool and the various synthetics, either alone or in blended combinations; in high speed warping and slashing, and many other operations.

Proven Safety & Efficiency

CHAPMAN Static Eliminators are absolutely safe. Over 40 years of *actual, continual use under varying conditions* have proven this. No shielding or any precaution is needed to protect operators. Neither operators, State or other governments object to its use. CHAPMAN Static Eliminators are silent and instantaneous in action; reduce the need for excessive humidity; require a minimum of maintenance. Operating cost is so low as to be negligible.

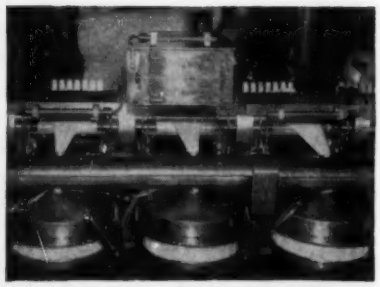
CHAPMAN STATIC ELIMINATORS ARE TESTED AND APPROVED BY THE UNDERWRITERS' LABORATORIES.

Chapman Engineering Service is available to you without obligation. Write us, and ask for your free copy of the CHAPMAN Handbook, Bulletin No. 66.

CHAPMAN ELECTRIC NEUTRALIZER COMPANY

ESTABLISHED 1904

22-58 FORE ST., PORTLAND 6, MAINE



Three slivers in a line of drawing — equipped with CHAPMAN Neutralizers. One clearer cover is raised.

Two lines of drawing, running blends containing wool, acetate rayon, etc. Equipped with CHAPMAN Neutralizers, insuring full production.

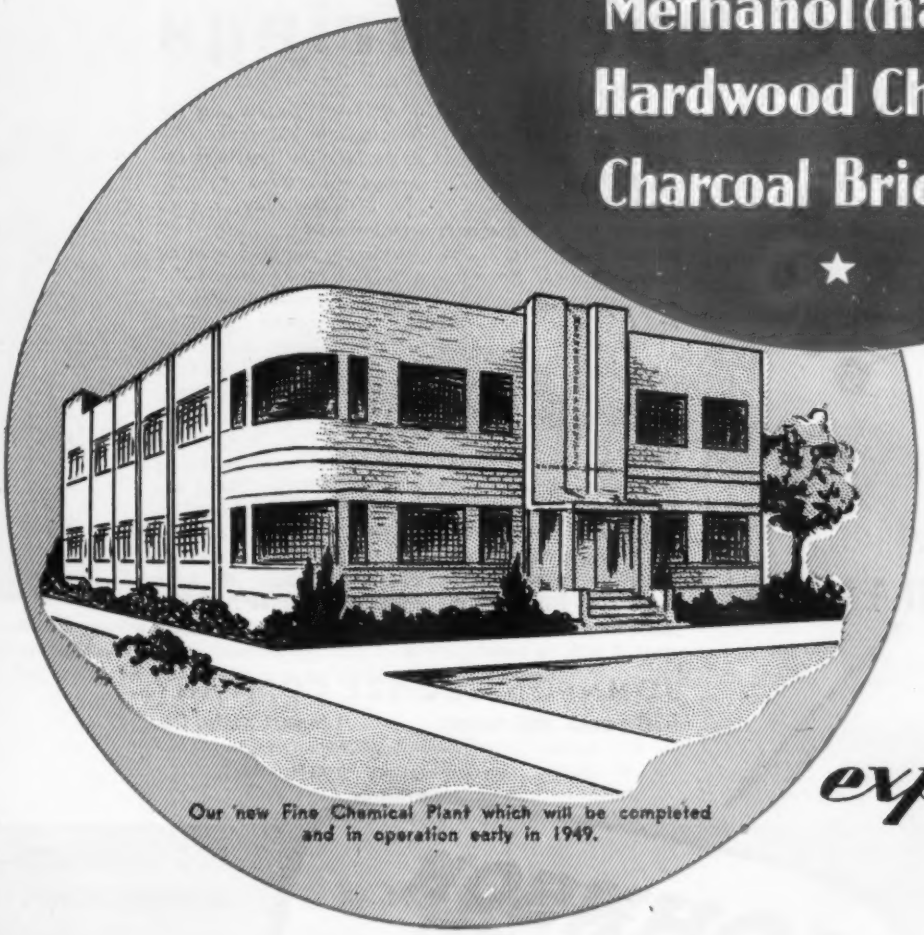
Line of Tape Condensers in a woolen mill, all equipped with CHAPMAN Neutralizers of the individual type.

A close-up view of a cotton card fitted with a CHAPMAN Neutralizer.

producing

Acetic Acid
Muriatic Acid
Sodium Benzoate, U.S.P.
Benzaldehyde, technical and N F
Cinnamic Aldehyde
Methanol (natural)
Hardwood Charcoal
Charcoal Briquettes

★



Our new Fine Chemical Plant which will be completed and in operation early in 1949.

expanding

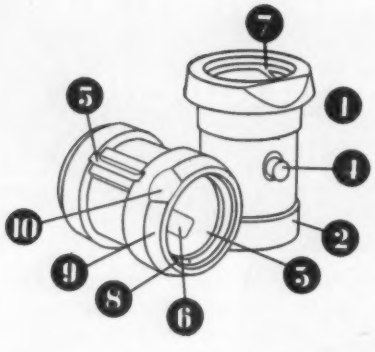
Tennessee Products & Chemical Corporation

General Office: NASHVILLE, TENNESSEE

Eastern Sales Office: 350 Fifth Avenue, New York 1, N. Y.

How to tell
QUALITY

in Sleeve Type Bearings



The final proof of QUALITY in Sleeve Bearings is the performance delivered. Performance, however, depends to a very great extent on how the bearings are made. These textile mill bearings are a good example. The first consideration . . . 1 . . . is the alloy. It must contain all the necessary ingredients . . . in their correct proportion . . . to provide the required bearing characteristics. Next, the machining of the outside 2 . . . and inside . . . 3 . . diameters must be smooth, and to precise measurements. Lugs, recesses and slots . . . 4-5-6 . . . must be correctly placed, accurately machined to the proper height or depth and free from burrs. Oil grooving . . . 7 . . . must be the proper style, the correct width and depth to guarantee proper distribution of the lubrication. The chamfer . . . 8 . . . must be at the proper angle, as should the self-aligning feature . . . 9 . . . and the flat . . . 10 . . . These are but a few of the many factors that enter into the production of top quality bearings. The easiest way to be sure of getting the finest quality available is to place your bearing requirements with Johnson Bronze. We have the skilled help . . . the complete facilities . . . and more then forty years of bearing experience. Why not consult with us now?

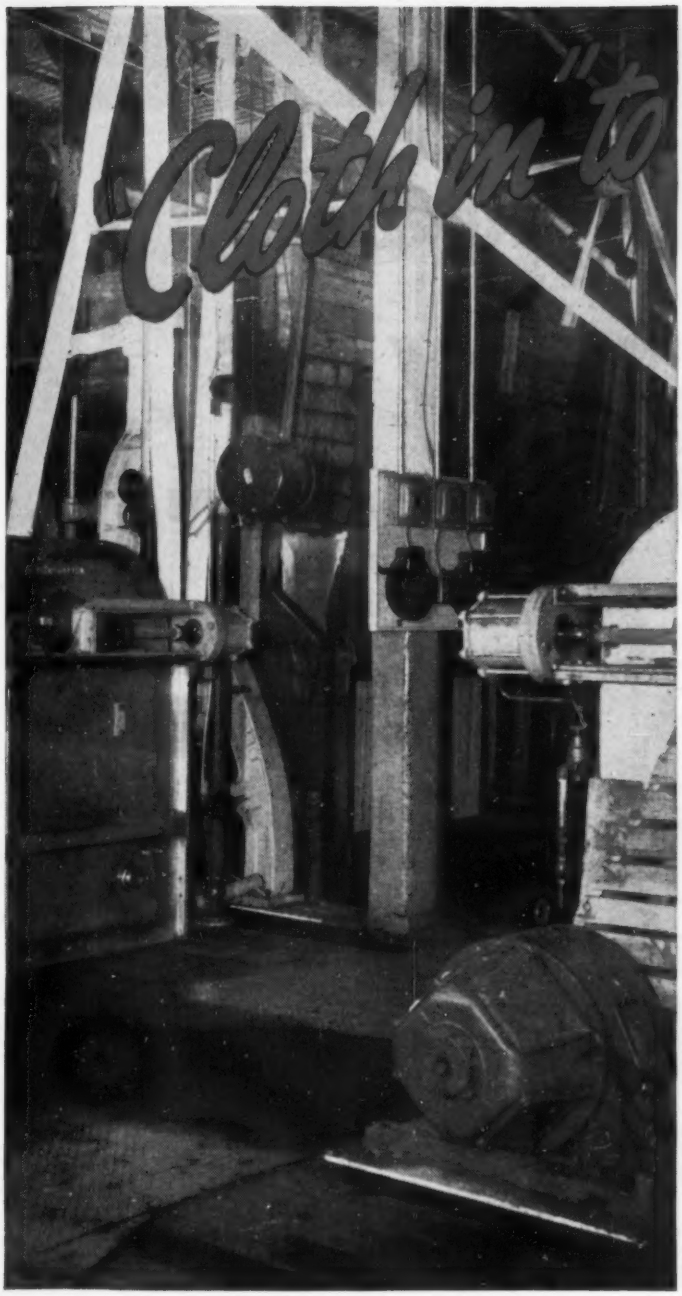
Where to get
QUALITY

JOHNSON BRONZE COMPANY
530 South Mill Street New Castle, Pa.

ATLANTA . . . BALTIMORE
BUFFALO
CAMBRIDGE, MASS.
CHICAGO
CINCINNATI
CLEVELAND
DALLAS . . . DENVER
DETROIT . . . KANSAS CITY

JOHNSON BRONZE
SLEEVE BEARING HEADQUARTERS

LOS ANGELES
MINNEAPOLIS
NEWARK
NEW YORK
PHILADELPHIA
PITTSBURGH
SAN FRANCISCO
ST. LOUIS . . . . SEATTLE



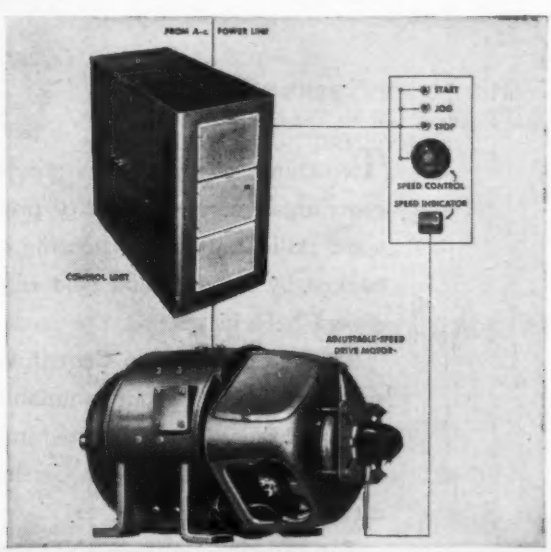
Maximum efficiency in the operation of this modern Becco Process Continuous Bleaching Range at Cluett, Peabody & Co., Inc. is assured by its multi-motored Reliance V★S Drive.

"Cloth out"

TOP SPEED PROCESSING at BOTTOM DOLLAR COST

...with RELIANCE V★S DRIVE

Actual case histories from mills everywhere prove that Reliance V★S Drive assures maximum processing efficiency to maintain production at peak and to keep costs down. It has a long record of successful applications on continuous bleaching, and finishing ranges and other modern textile equipment. The *Completely-packaged All-electric, Adjustable-speed Drive* Reliance V★S will operate direct from your mill's A-c. circuit. A variety of functions, including quick, smooth starting and stopping, stepless speed changing and maintenance of proper tension, can be had with automatic or manual control at the machine or from any remote location. For a full account of the advantages Reliance V★S Drive can bring to your operations, write today for *new* Bulletin 311.



Conveniently-packaged, factory-wired V★S Drives are available from 1 to 200 hp. Two or more Motors may be operated simultaneously from a single Control Unit.

Sales Representatives in Principal Cities

RELIANCE ELECTRIC AND ENGINEERING CO.

1085 IVANHOE ROAD • CLEVELAND 10, OHIO

"Motor-Drive is More Than Power"

THERE'S SERVICE BEHIND THIS PUMP!

Gardner-Denver Horizontally Split-case Double Suction Centrifugal Pump —one of many Gardner-Denver types.

Two things are needed to provide complete satisfaction when you buy a centrifugal pump—a quality product *and* quality service. For often you want skilled advice in choosing exactly the pump for your needs—advice backed by research and field experience. Often, too, you require friendly, expert help in getting the most out of your pump after it is installed.

All Gardner-Denver Centrifugal Pumps are sold with this backing of service—always at your command—always available at your call. Gardner-Denver branch offices, located in principal centers throughout the country, stand ready to keep your Gardner-Denver pump at peak efficiency year after year.

For superior pumps—AND superior service—write Gardner-Denver.

Gardner-Denver Company, Quincy, Illinois

GARDNER-DENVER SINCE 1859

Atlanta, Ga.	Knoxville, Tenn.	Philadelphia, Pa.
Birmingham, Ala.	Washington, D. C.	Pittsburgh, Pa.
Boston, Mass.	New York, N. Y.	New Orleans, La.

If you have a Tramp Iron Problem Send for this

NEW CATALOG

FREE

Contains Full Information On:

- **PLATE MAGNETS** — *for*— LIGHT DUTY, MEDIUM DUTY, HEAVY DUTY
- **MAGNETIC PULLEYS** — *for*— TRAMP IRON REMOVAL, PURIFICATION PURPOSES
- **MAGNETIC DRUMS** — *for*— REMOVAL OF FINES, TRAMP IRON
- **PIPE LINE TRAPS** — *for*— 2" LINES, 3" LINES, 4" LINES
- **PNEUMATIC LINE ASSEMBLIES** — *for*— HORIZONTAL INSTALLATION, VERTICAL INSTALLATION

GET YOUR FREE COPY OF THIS CATALOG BY WRITING TO ERIEZ MFG., ERIE, PA.

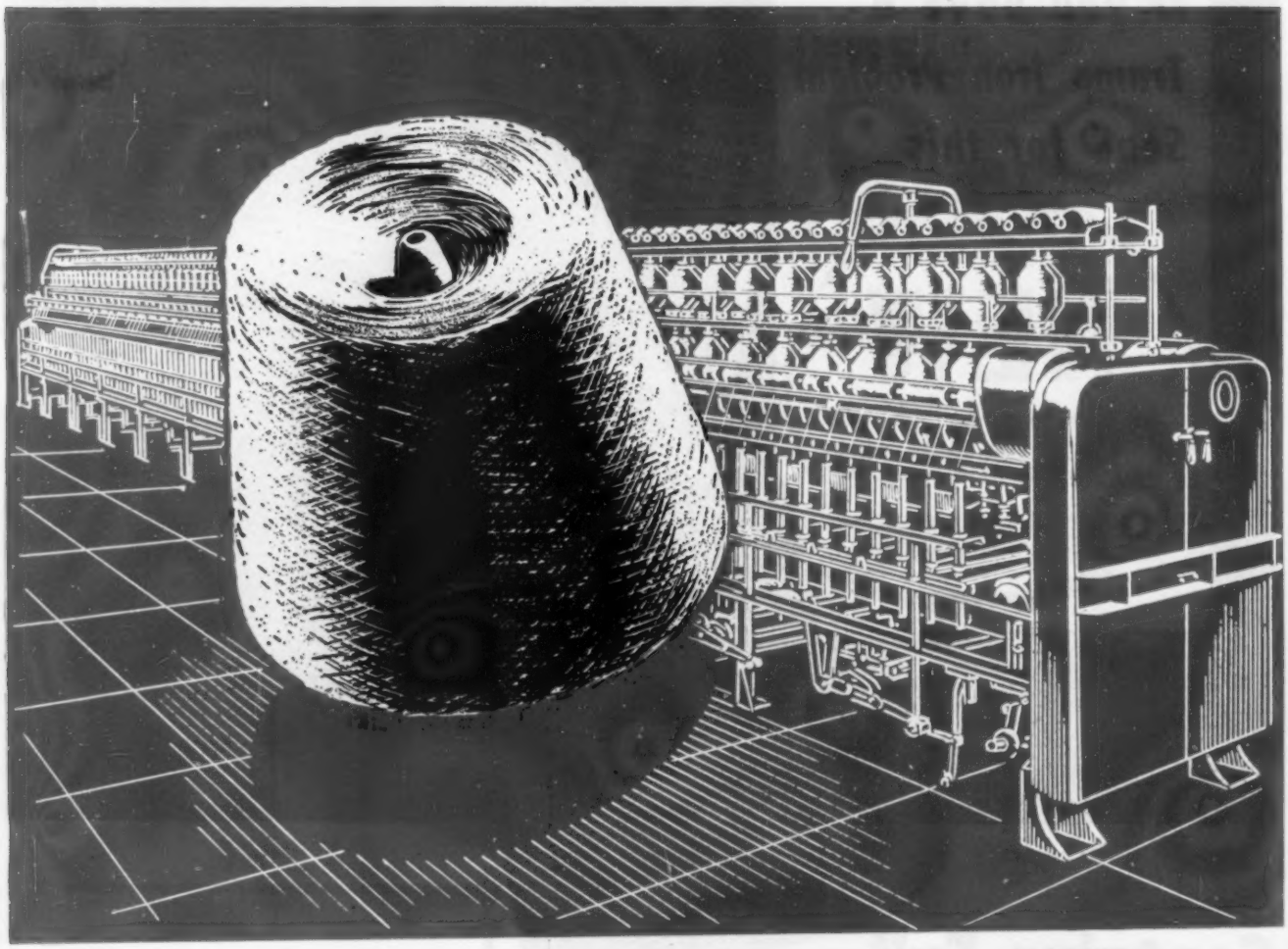
Catalog Gives Complete

- ENGINEERING DATA
- SPECIFICATIONS
- OPERATING CAPACITIES
- WEIGHTS
- SIZES
- LABORATORY FACILITIES

ERIEZ MANUFACTURING COMPANY

1501 East 12th Street, Erie, Penna.

YES! Tycol Alweave Textile Spindle Oils perform better . . . BETTER . . . BETTER



Tycol Alweave Textile Spindle Oils perform better, because:

. . . *Tycol Alweave Textile Spindle Oils* are highly refined, light colored, low viscosity oils recommended for spindles, where speeds of 7500 R.P.M. or higher are obtained.

. . . *Tycol Alweave Textile Spindle Oils* are known for their high resistance to oxidation and ability to maintain body under high temperature.

. . . *Tycol Alweave Textile Spindle Oils* reduce bolster losses, eliminate spindle drag and thread breakage.

For further information about Tycol Alweave Textile Spindle Oils and the rest of Tycol's "engineered lubricant" line, write, wire or phone your nearest Tide Water Associated Office.

LUBRICATION — "ENGINEERED TO FIT THE JOB"

TYCOL
INDUSTRIAL LUBRICANTS

Boston • Charlotte, N. C.
Pittsburgh • Philadelphia
Chicago • Detroit • Tulsa
Cleveland • San Francisco

TIDE WATER ASSOCIATED OIL COMPANY
17 BATTERY PLACE - NEW YORK 4, N.Y.

SANDOZ PRESENTS

the color achievement of the month

Band Music

. . . BY CEREY

A rich harmony of color tones promises to put this great-dress at the top of the season's hit parade. It's a Kane-Weill original, created from 100% pure wool woven into large bands of claret-red, beige and earth-brown by Cerey Woolens, Inc., one of the many leading names in fashion among Sandoz customers.

Heavy shades like these require the use of the best chrome dyes that will stand mill fulling without bleeding. For such purposes, the following Sandoz dyes are outstanding.

METOMEGA CHROME BORDEAUX 2BL
METOMEGA CHROME BROWN RLL
METOMEGA CHROME YELLOW ME

Their excellent fastness to carbonizing also assures the dyer that the finished piece will meet the designer's color specifications. And the ultimate wearer can be sure of the garment's fastness to sunlight, weather, perspiration and dry cleaning.

It is for such reasons that Sandoz colors are used in so many of the fabrics—gowns and carpets, upholstery and suitings—that find their way to the best-seller list.

For acid, chrome or direct dyes . . . or auxiliary chemicals . . . for both natural and synthetic fibres . . . be guided by the successful "color achievements" you see in these Sandoz advertisements.

SANDOZ CHEMICAL WORKS, INC., 61 VAN DAM STREET, NEW YORK 13, N. Y.

Application laboratories and stocks at Boston, Philadelphia, Charlotte, Chicago, Los Angeles, Toronto. • Other branches at Providence and Paterson.

SANDOZ *thinks ahead with textiles*

S SANDOZ

THIS IS NO. 72 OF A SERIES ON

GETTING THE MOST FROM TWISTING

Information about twisting designed to show improvements in twisting equipment and new ideas in the twisting operation

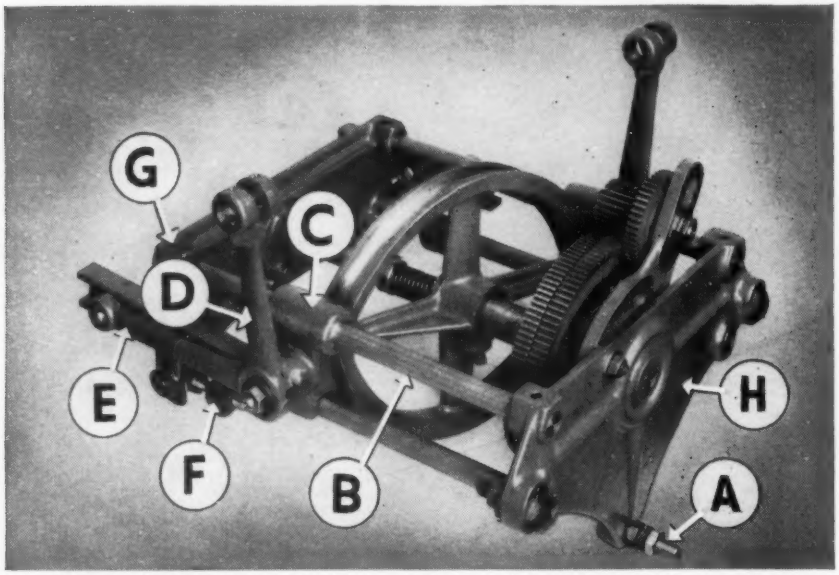


Fig. 1—Atwood Model 100 Traverse Motion Assembly complete as shipped.

TRAVERSE MOTION ASSEMBLY

Atwood Model 100 Up-Twister

Greater rigidity of the traverse motion assembly and a more positive action resulting in greater uniformity of the finished package have been achieved by a re-design of the traverse motion in the Model 100 Up-Twister.

Complete assembly of the traverse motion at the factory permits a thorough inspection of all mating parts. Thus the accuracy with which every assembly will perform can be assured at the time it leaves the plant.

The unit is attached to the end stand of the machine by two bolts and an adjusting stud (A in Fig. 1) which is used for leveling. The assembly is leveled lengthwise by placing a small level on the horizontal guide and support rod (B) and adjusting the stud (A) until the bubble is centered. Oversize holes in the end stand, through which the bolts are passed, allow for proper positioning and any crosswise leveling that may be necessary. In this case a larger level is placed across the two top guide and support rods.

To give added support, two stiffening rods are attached at one end to the end stand and at the other end to the end plate (G). An oil drip pan and a gear guard are also provided. (Inasmuch as Fig. 1 shows the traverse motion assembly complete as shipped, the two stiffening rods, oil drip pan, gear guard, and traverse connector mentioned later are not shown.)

There are two traverse motion guide and support rods, made of ¾ in. stock, on each side of the unit, one located directly above the other and both held rigidly at one end by the base plate (H) and at the other end by the end plate (G). Vibration and rocking motion of the rods in relation to the traverse stroke are, therefore, reduced.

Each traverse lever guide (C) has two bushings which guide on the upper rod. The lower position is grooved to guide on the lower rod. Any lateral movement of the guide, as it is reciprocated by the cam, is therefore prevented by the lower rod.

Short linkages reduce leverage and provide a more positive action of the traverse lever (D). This lever has two legs extending at approximately a 90° angle to one another. The traverse bar connector is attached to one of these legs. A block (E) attached to the other leg rides in a groove in the traverse adjusting slide. Exact adjustments, either to increase or decrease the traverse length, may be obtained by setting the slide at an angle to the horizontal. An adjusting screw (F) is provided for this purpose.

The traverse motion should be adjusted individually on each side of the machine. Because of the auxiliary traverse motion, it is only possible to set the traverse length by winding yarn on one take-up spool while making slight adjustments as indicated from observing the build of the package. The traverse slide angle adjustment should then be locked. The adjustable traverse connector rod may then be set to centralize the traverse at the take-up bobbins after which setting of the yarn guides may be necessary to correct for individual bobbins.

November 1948

*Reg. U.S. Pat. Off.

23-8-3

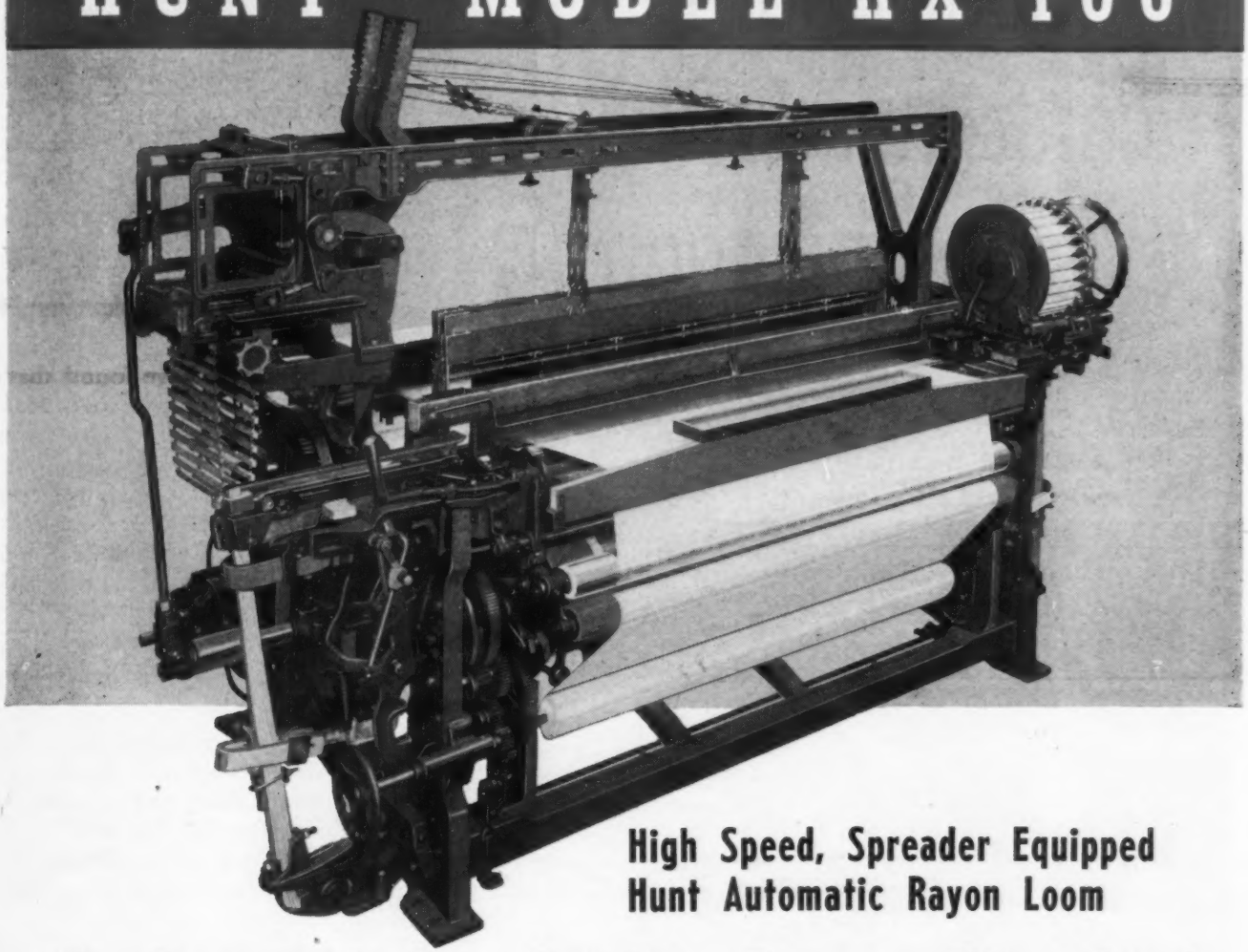
WINDING AND TWISTING MACHINERY FOR NATURAL AND SYNTHETIC YARNS

UNIVERSAL WINDING COMPANY

INCLUDING ATWOOD DIVISION

PROVIDENCE BOSTON PHILADELPHIA UTICA CHARLOTTE ATLANTA CHICAGO LOS ANGELES MONTREAL and HAMILTON

HUNT MODEL HX-100



High Speed, Spreader Equipped Hunt Automatic Rayon Loom

Engineered for Better Rayon Weaving!

Massive New Hunt Loomside Gives Greater Operating Efficiency

After many months of studying the problems involved, Hunt engineers designed this new, vastly heavier loomside, which is Built Into Hunt Rayon and Cotton Looms. Integrated with an improved Hunt Spreader, these new loomsides give more weight and stability—assure smoother, more efficient operation.

Introduced recently at the Southern Textile Exposition, the Hunt Model HX-100 Rayon Loom was a center of attraction. It brought enthusiastic comment from mill owners and technical men alike.

Built on a specially designed heavy duty frame and equipped with an improved Hunt Spreader, the Hunt Rayon Loom features Low Roll Take-Up, Latest Bartlett-Type Let-Off, Center Filling Fork, and Electric Stop Motion. It is made for cloth widths up to 50 inches and is individually motor driven.

The Hunt Model HX-100 was designed to supply the industry's demand for a modern, high-speed rayon filament loom. It is sturdier and steadier, and provides the increased production and greater efficiency needed for today's operating conditions.

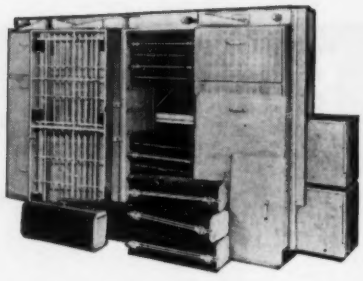
Write, wire, or phone today for details of cost, deliveries, and installation.

HUNT MACHINE WORKS, Inc.

200 ACADEMY STREET TELEPHONE 2-5681

GREENVILLE, SOUTH CAROLINA

Soot and dust can't invade this spinning room



AAF Electro-Cell provides super-clean air to safeguard product quality

MILL operators have found that clean air returns a clear profit in the form of fewer rejects and seconds. That's why the air entering this spinning room is not only conditioned for temperature and humidity but completely free from damaging soot and dust. And here, as in so many mills, the job of delivering this super-clean air is entrusted to AAF Electro-Cell Electronic Precipitators.

In addition to its high efficiency, the Electro-Cell has many design features that appeal to the practical operating man. Removable collector plate cells permit manual washing and re-oiling in place, removing for cleaning in a special tank or automatic washing, drying and recoating with minimum interruption to operation.

Electro-Cell's sectional construction cuts weight, reduces number of electrical connections, protects wiring from dirt and water. Full height ionizers minimize electrical losses, reduce ozone and simplify ionizing wire replacement.

The complete story of Electro-Cell's high efficiency and low cost operation is contained in Bulletin 252. Ask your local AAF representative for a copy or write to—

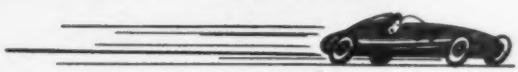
AMERICAN AIR FILTER COMPANY, INC.
275 Central Avenue, Louisville 8, Ky.
In Canada: Darling Bros., Ltd., Montreal, P. Q.

AAF
AIR FILTERS
AND ELECTRONIC PRECIPITATORS

THE GOOD RIGHT HAND OF INDUSTRY

Off in a Jiffy...

Speed changes are quickly made with the two-piece QD Sheave



The rim comes off easily—without hammering, tugging or wrestling. The same bolts that fasten the assembly are used as jack screws to break the tapered fit between rim and hub. The hub stays put in permanent alignment.

Installing the QD sheave is just as easy. The lightweight split hub goes on first . . . is locked in place . . . then the tapered-bore rim slides over the tapered-cone hub . . . is pulled up by full-size bolts.

Easy as this is, the QD *stays tight* on the shaft. The cone-friction grip on the hub produces a positive press fit on the shaft.

FHP to 200 HP—
Immediate Delivery

Call on your Worthington Distributor—your local "good right hand of industry"—listed in Thomas' Register under "Drives" He has ample stocks of Worthington Multi-V-Drives, supported by the most complete factory stocks of QD Sheaves in "A", "B", "C" and "D" sections . . . fhp to 200 hp. (Goodyear EC Cord or Steel Cable V-Belts are used exclusively in Worthington Multi-V-Drives.)

Worthington QD Sheave—Original Tapered Cone-Grip Sheave. Easy to Get On—Easy to Get Off—Yet Always Tight on the Shaft. The Quality-Built Sheave That Makes Alignment Easy—for Longer Belt Life.

WORTHINGTON

MERCHANDISING DIVISION

The Good Right Hand of the Textile Industry

PUMPS: centrifugal, power, rotary, steam
COMPRESSORS: horizontal, radial, vertical
POWER TRANSMISSION: sheaves, V-belts, variable speed drives

Worthington Pump and Machinery Corp.
Merchandising Division, Dept 18578
Harrison, New Jersey

☐ Send latest bulletin on Worthington Multi-V-Drives.

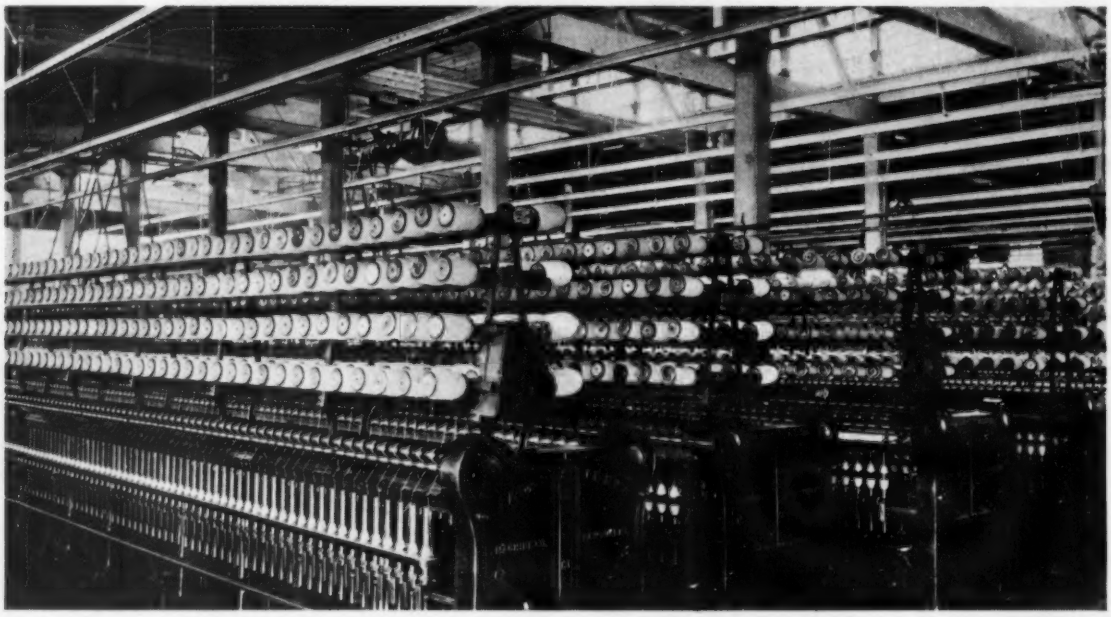
Name.....

Company.....

Address.....

B 8-578

Troubled with broken ends and blackened yarns?



Change to NON-FLUID OIL

Most leading yarn and thread mills find that NON-FLUID OIL reduces traveler friction and stops overstrain on yarn—so cuts down the number of broken ends and does away with most blackened yarn. By providing clean, dependable lubrication, NON-FLUID OIL assures more even operation of frames with increased output of cleaner, better quality yarn at lower production cost.

Write for Bulletin T16TI and your free testing sample of NON-FLUID OIL.

NEW YORK & NEW JERSEY LUBRICANT CO.

292 Madison Avenue, New York 17, N. Y.

Southern District Manager: FALLS L. THOMASON, Charlotte, N. C.

WORKS: Newark, N. J.

WAREHOUSES: Charlotte, N. C.—Greenville, S. C.—Atlanta, Ga.
—Providence, R. I.—Detroit, Mich.—Chicago, Ill.—St. Louis, Mo.

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called fluid grease imitations of NON-FLUID OIL often prove dangerous and costly to use.

NON-FLUID OIL
TRADE MARK REGISTERED

STANDAFINS

for finishing

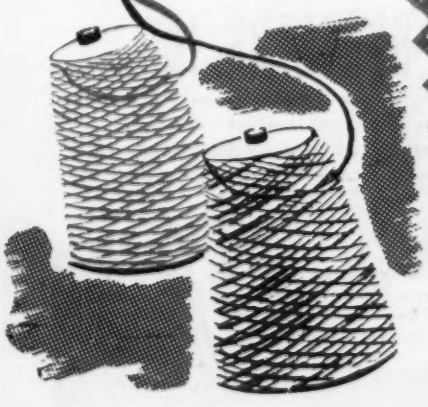
- A full range of body, hand and drape for all fabrics.
- Resistant to laundering and dry cleaning.
- Easy to apply on conventional equipment; no curing required.
- Compatible in bath with other finishing materials.
- Impart slip proofing and snag resistance to woven and knitted goods.
- Binders for pigments and fillers.

STANDAFIN 77
Soft, full hand

STANDAFIN 79
Intermediate firmness

STANDAFIN R10
Firm, full hand

We welcome your inquiries on these and other Standafins.
Write or call today.



This wool sweater

has been washed...

Yes, tubbed and rubbed because that's the way to get any fabric truly clean!

And....

it did not shrink

. . . because it can't mat or felt! . . . its fast colors come up with new-like vividness . . . all the natural characteristics of the wool are retained!

because it's

Schollerized

Comfort and useful life of the garment have been greatly enhanced because, made to size it stays to size . . . with no loss of the wool fibre's inherent resiliency, elasticity, softness, texture, feel or "hand!"

Schollerized
WASHABLE WOOL
SAFE TO TUB • SAFE TO RUB

The SCHOLLER WOOL SHRINKAGE-CONTROL PROCESS* is extremely flexible in application. Wool may be readily Schollerized in the raw stock, tops, skeins, packages, or fabric.

U. S. and Foreign Patents Pending

SCHOLLER BROTHERS, INC.

Manufacturers of Scouring, Dyeing and Finishing Materials

COLLINS at WESTMORELAND, PHILADELPHIA 34, PA.

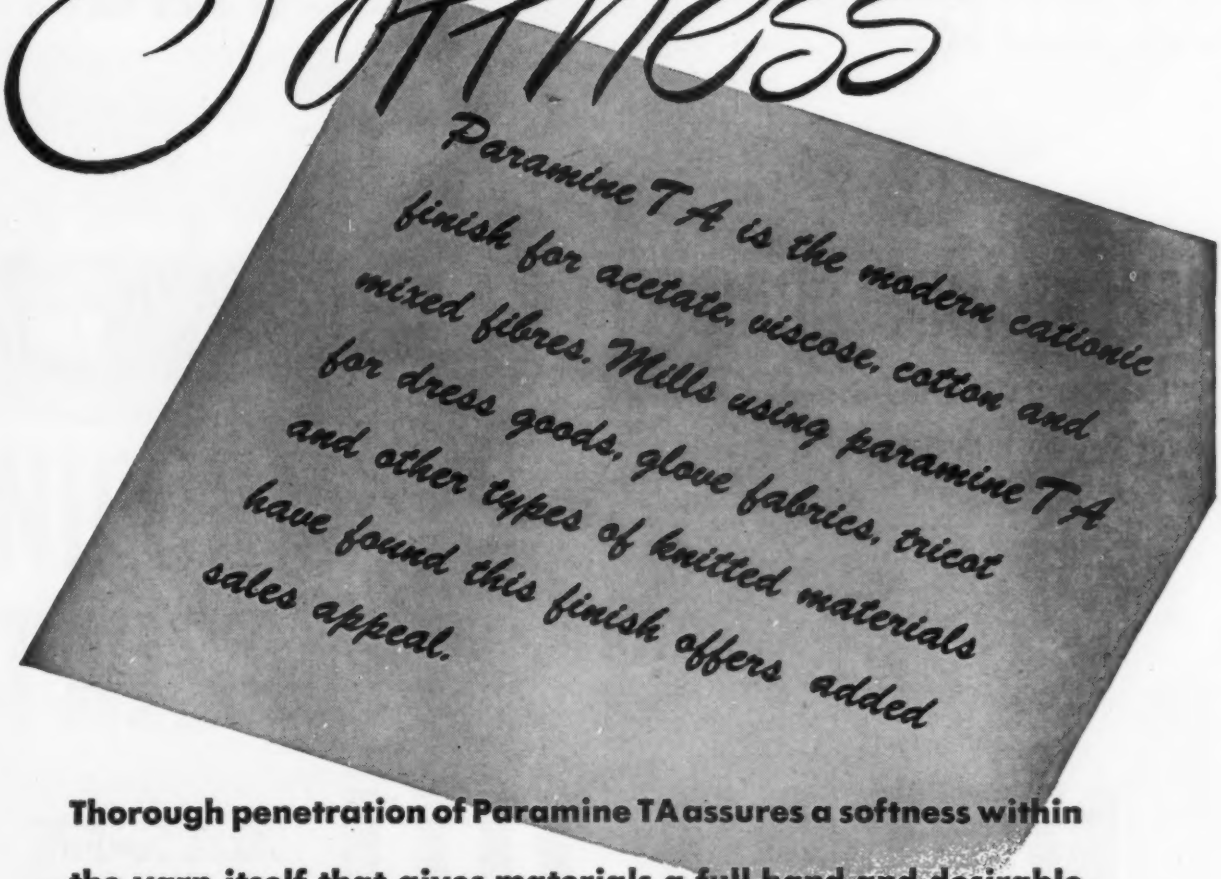
IN CANADA: SCHOLLER BROTHERS, LTD., ST. CATHARINES, ONTARIO

SERVING THE TEXTILE INDUSTRY FOR MORE THAN FORTY YEARS

Write today for the interesting brochure on the Scholler Wool Shrinkage-Control Process and its applicability to your wool product.

IF YOU WANT

DURABLE *Softness*


Paramine TA is the modern cationic finish for acetate, viscose, cotton and mixed fibres. Mills using paramine TA for dress goods, glove fabrics, tricot and other types of knitted materials have found this finish offers added sales appeal.

Thorough penetration of Paramine TA assures a softness within the yarn itself that gives materials a full hand and desirable drape—its substantive action produces a durable, lasting finish —Application is simple.

Use Paramine TA

*Reg. U. S. Pat. Off.

WRITE FOR DETAILS OR DEMONSTRATION

Arkansas Co. INC.

Manufacturers of Industrial Chemicals for Over 40 Years

NEWARK, NEW JERSEY

FOR

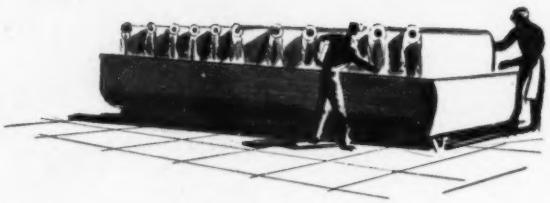
DEPENDABLE TIME

... the Naval Observatory at Washington is the *accepted standard* of the nation.

FOR

DEPENDABLE LUBRICITY

... NOPCO 1111 is the *accepted standard* of the Rayon Industry.



NOPCO* 1111

CREPE SOAKING OIL AND WARP SIZE SOFTENER

Here are some reasons why NOPCO 1111 is preferred by Rayon Throwsters and Weavers in America, Canada and other countries . . .

Unsurpassed softness and lubricity . . . controlled pebble . . . ease of removal during boil-off . . . no volatilization in drying . . . no oxidation or rancidity.

For full information write for "Important Points Regarding Rayon Warp Sizing," "NOPCO 1111—Soaking Oil for Rayon Crepe Yarns."

NOPCO CHEMICAL COMPANY, Harrison, N.J.

Formerly National Oil Products Company

Branches: Boston • Chicago • Cedartown, Ga. • Richmond, Calif.

EVOLVED THROUGH RESEARCH NOPCO TRADEMARK

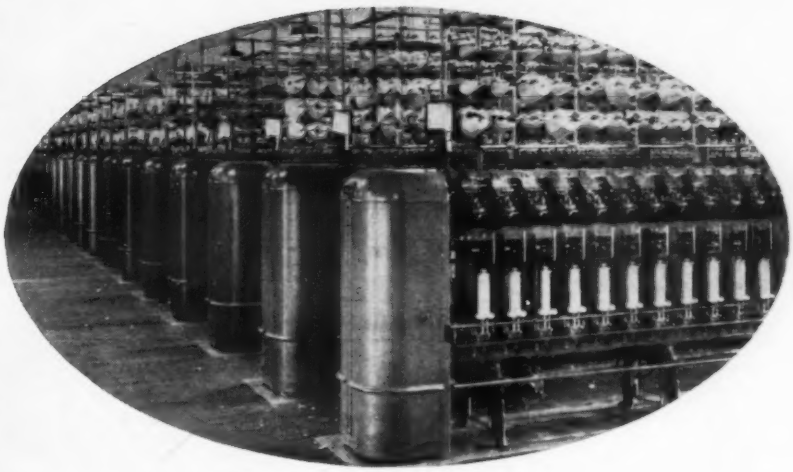
*REG. U. S. PAT. OFF.

AMOSKEAG FABRICS

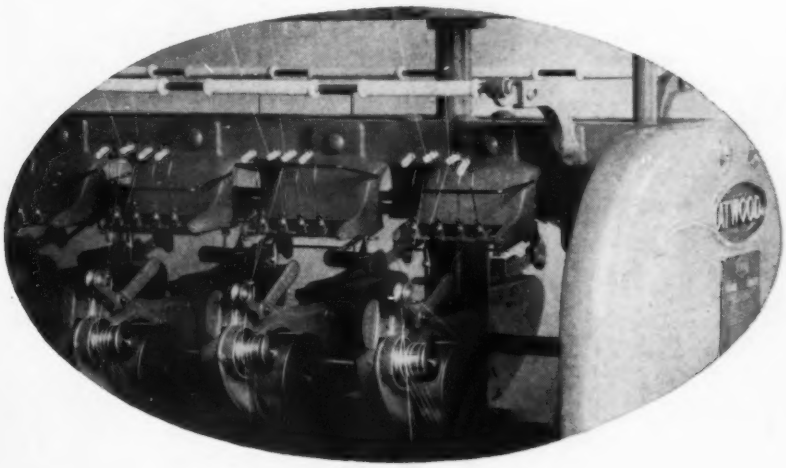
TWISTS SPUN RAYON ON MODEL 10'S

UNIFORM TWIST

IS GUARANTEED BY SEVERAL ATWOOD FEATURES



Twister bobbins of spun rayon, that are uniform from bobbin to bobbin and from spindle to spindle, are produced by The Amoskeag Fabrics, Inc. on Atwood Model 10 Ring Twisters. These are the all-purpose ring twisters with automatic stop motions for each end and each ply.



Mounting of supply creel to provide free delivery . . . accurate control of tension . . . constant yarn speed delivered by *feed rolls* . . . smooth traverse of ring holder rail . . . rigid mounting of rings and ring holders . . . and use of one endless, lapless belt to give uniform speed from spindle to spindle . . . all contribute to accurate and uniform control of twist on the Model 10.

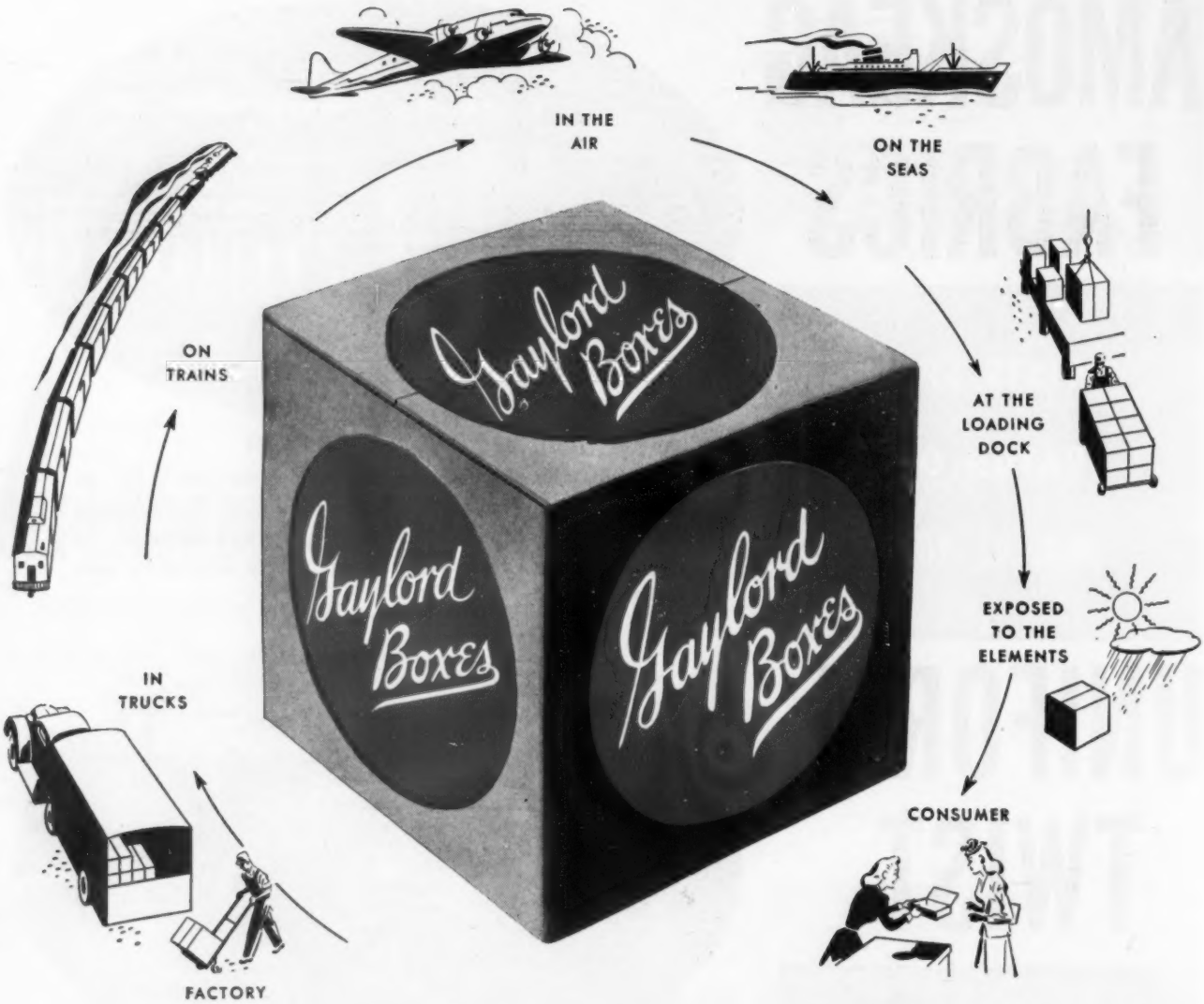
UNIVERSAL WINDING COMPANY

ATWOOD DIVISION

Providence, Boston, Philadelphia, Utica, Charlotte, Atlanta, Chicago, Los Angeles; Montreal, Hamilton, Canada; Manchester, England; Paris, France; Basle, Switzerland
Agents in every principal textile center throughout the world

Winding and Twisting Machinery for Natural and Synthetic Yarns

Model 10 *automatic stop motion for each end and ply*



ON GUARD

TO MINIMIZE YOUR SHIPPING RISKS

No matter how long or rugged the trip for your products from factory to user, Gaylord Boxes are designed to assure safe delivery. Their protection reduces damage claims and helps you promote greater customer good will.

GAYLORD CONTAINER CORPORATION, General Offices: ST. LOUIS

Corrugated and Solid Fibre Boxes ●
Folding Cartons ●
Kraft Grocery Bags and Sacks ●
Kraft Paper and Specialties ●

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City
Seattle • Indianapolis • Houston • Los Angeles • Oakland • Minneapolis • Detroit
Jacksonville • Columbus • Fort Worth • Tampa • Cincinnati • Dallas • Des
Moines • Oklahoma City • Greenville • Portland • St. Louis • San Antonio
Memphis • Kansas City • Bogalusa • Milwaukee • Chattanooga • Weslaco
New Haven • Appleton • Hickory • Greensboro • Sumter • Jackson • Miami

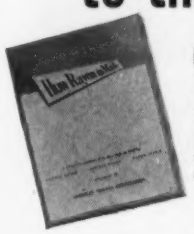
Rayon Reports

Prepared Monthly by American Viscose Corporation, New York, N.Y. — November, 194

Avisco Publications Provide Valuable Information to the Textile Industry

American Viscose Corporation maintains a technical information service to help keep industry abreast of the new developments in rayon. As part of this service Avisco publishes literature (a few typical examples are illustrated) that is available to interested individuals. In addition American Viscose technical men have written standard textbooks which can be secured through regular book channels.

Another phase of the Avisco information program involves the preparation of general material for distribution to schools and the public. Included are films, education kits and 32 reference leaflets. A complete catalogue of all Avisco publications will be sent on request.



How Rayon is Made—16 pages.

BULLETIN No. 700

Illustrates the steps in making viscose rayon, acetate rayon and rayon staple. Printed 6-47.

Short Story of Rayon—28 pages.

BULLETIN No. 2008B

Gives brief history of rayon, summarizes production methods, and details growth of American Viscose Corporation. Role of research in rayon development is stressed. Reprinted 1-48.

Record of Rayon Cord in Tires—20 pages.

BULLETIN No. 2009

This report gives technical data on the performance of rayon cord in tires, explains why greater safety and longer wear result from the use of rayon. Included is a sample of actual rayon tire cord. Printed 6-46.

Handling of Rayon Cakes—16 pages.

BULLETIN No. 2118

Advantages and techniques of proper handling. Well illustrated with photographs and easy-to-read diagrams for industrial use. Printed 6-46.

Preview of American Viscose Corporation—40 pages.

BULLETIN No. 2120A

An informal outline of general information about the Corporation for the use of college graduates. It includes detailed organization facts about our plant towns; is profusely illustrated with personnel and product pictures. Reprinted 9-48.

How Rayon Staple Serves the Woolen & Worsted Industries—12 pages.

BULLETIN No. 2124

A summary of the advantages of blending rayon staple with woolens and worsteds, plus descriptions of rayon staple's outstanding characteristics. Printed 1-47.

Textile Research Department—36 pages.

BULLETIN No. 2138

Describes department's commercial-scale facilities for cotton spinning, woolen spinning, worsted spinning, warping and weaving, knitting, and dyeing and finishing. Explains organization and functions of department. Profusely illustrated. Printed 6-47.

Avisco Crimped Staple—12 pages.

BULLETIN No. 2175

Explains the usefulness of Avisco Crimped Staple, the permanence of its crimp and its running efficiency. Includes samples of staple and swatches of fabrics made with Avisco Crimped Staple. Printed 11-47.

Tricot Fabric Design—124 pages.

Manual explaining fundamentals of designing tricot fabrics. Shows how to employ various stitch patterns with best effect. Written by Thomas Johnson, American Viscose Corporation. Published by McGraw-Hill Book Co. Price $2.50. Printed 10-46.

Spinning Rayon Staple on the Cotton System—148 pages.

Tells of the development of rayon staple, describes its properties, and details the methods and techniques developed to help manufacturers achieve the best results from its use on the cotton system. Photographs, charts, graphs and tables furnish a wealth of informative data. Offered only to technically qualified persons in industry. Printed 2-48.

Rayon Technology—276 pages.

This textbook was based on a seminar consisting of 6 advanced courses in rayon. These courses were given by the Textile Research Department of American Viscose to textile school deans and staff specialists in synthetic fibers. Includes technical information on spinning rayon staple on the cotton, woolen and worsted systems, rayon from yarn to fabric, as well as knitting, dyeing and finishing. Published by McGraw-Hill Book Co. Price $3.75. Printed 5-48.

MAKE USE OF *Avisco* 4-PLY SERVICE

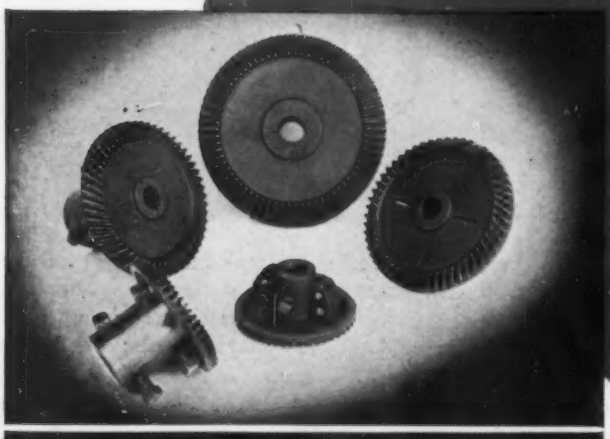
To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

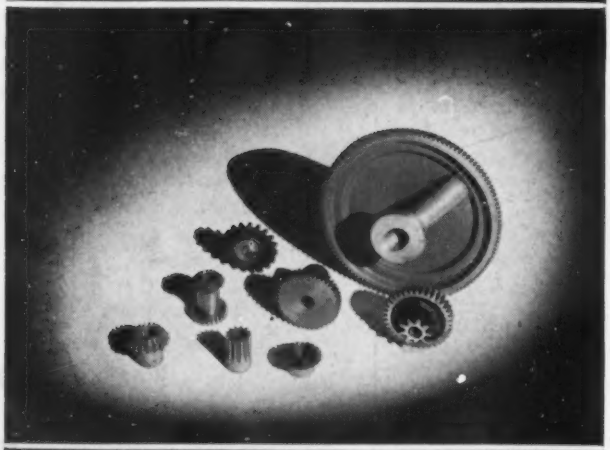
1 FIBER RESEARCH
2 FABRIC DESIGN
3 FABRIC PRODUCTION
4 FABRIC FINISHING

AMERICAN VISCOSE CORPORATION

America's largest producer of rayon

Sales Offices: 350 Fifth Avenue, New York 1, N. Y.; Charlotte, N. C.; Cleveland, Ohio; Philadelphia, Pa.; Providence, R. I.





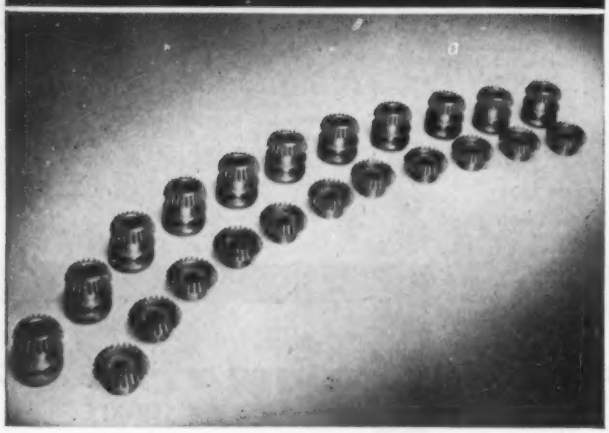


Plate and Coupling Gears
Card Coiler Gears
Bobbin and Spindle Gears

PRECISION MADE

Gear manufacture is not a simple foundry casting problem. Demands for long life—superior performance—efficient service, call for precise engineering in the process.

Gears by Southern States give longer, smoother, more efficient operation because they fit accurately, mesh easily, reduce chatter and vibration. This superior performance of Southern States machine-molded cast-tooth gears and precision-machined cut-tooth gears is achieved through modern metallurgical and foundry practices to assure uniformity of specifications. Accurate machining and rigid inspection assure maximum operating efficiency. Southern States products are guaranteed by an experience gained from thirty years of service to many of the South's leading textile mills.

Southern States Bobbin and Spindle gears, Plate and Coupling gears, and Card Coiler gears to fit all frames. Submit samples, drawings or specifications for quotations.

QUANTITY PRODUCTION OF CAST-TOOTH GEARS. CUT-TOOTH GEARS FROM 2 TO 32 DP.

Southern States Equipment Corp.

HAMPTON GEORGIA

Representatives - Mechanical Division

William A. Knapp
Atlanta, Georgia

John C. Walters
Hampton, Georgia

Roy Schrimshire
Columbus, Georgia

F. C. Todd, Inc.
Gastonia, N. C.

Mathews Equipment Co.
Providence, R. I.

C. H. Kennington
Charlotte, N. C.

Textile Parts & Machine Co.
Gastonia, N. C.

Largest Manufacturer of Cast-Tooth and Cut-Tooth Gears in the South

AS AN OIL COOLER
AS A WATER COOLER
AS A VAPOR CONDENSER
AS A WATER HEATER
AS A PROCESS HEATER

Used for practically every type of service
Serves almost every operating condition
Transfers more BTUs per dollar invested than any other exchanger
Standardized, mass produced at low unit cost
First and only shell and tube exchanger carried in stock as shelf goods
Non-corroding, longer lasting, all-nonferrous construction

ROSS

"BCF" EXCHANGERS

For

DIESELS • GASOLINE ENGINES • COMPRESSORS
REDUCTION GEARS • TURBINES • HYDRAULIC
PRESSES • THRUST BEARINGS • MACHINE TOOLS
HYDRAULIC COUPLINGS • TORQUE CONVERTERS
PLASTIC INJECTION MOLDING MACHINES • PUMPS
DIE CASTING MACHINES • LABORATORY WORK
CUTTING OIL • QUENCHING OIL • STOKERS
TRANSFORMERS • FORCED DRAFT BLOWERS

Specifically, what does the New "BCF" have to offer you?

THIS NEW 8-PAGE BOOK... will tell you graphically, briefly about the unparalleled advantages as a quantity-order accessory for primary equipment manufacturers, or as an individual item for industrial or commercial users. *Just fill out and mail the coupon.*

Ross Heater & Mfg. Co., Inc.
1461 West Ave., Buffalo 13, N. Y.

Please send FREE your new book No. 1.1K1

Name _____

Company _____

Address _____

City _____ *Zone* _____ *State* _____

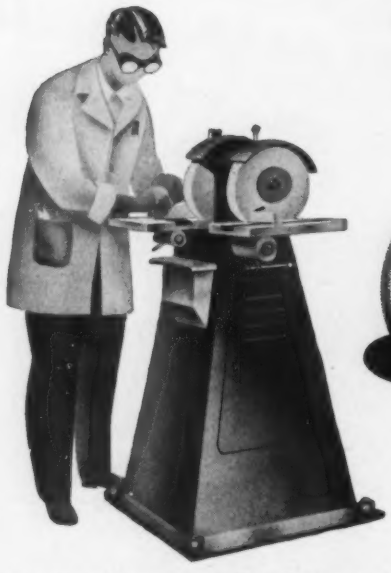
Division of American Radiator & Standard Sanitary corporation **ROSS HEATER & MFG. CO., INC.** Represented in Canada by Horton Steel Works, Ltd., Fort Erie, Ont.

Serving home and industry

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON

A BUYING GUIDE FOR ABRASIVES

ABRASIVE PROBLEM:
How can Selection and Application be simplified?



ANSWER BY
CARBORUNDUM
TRADE MARK

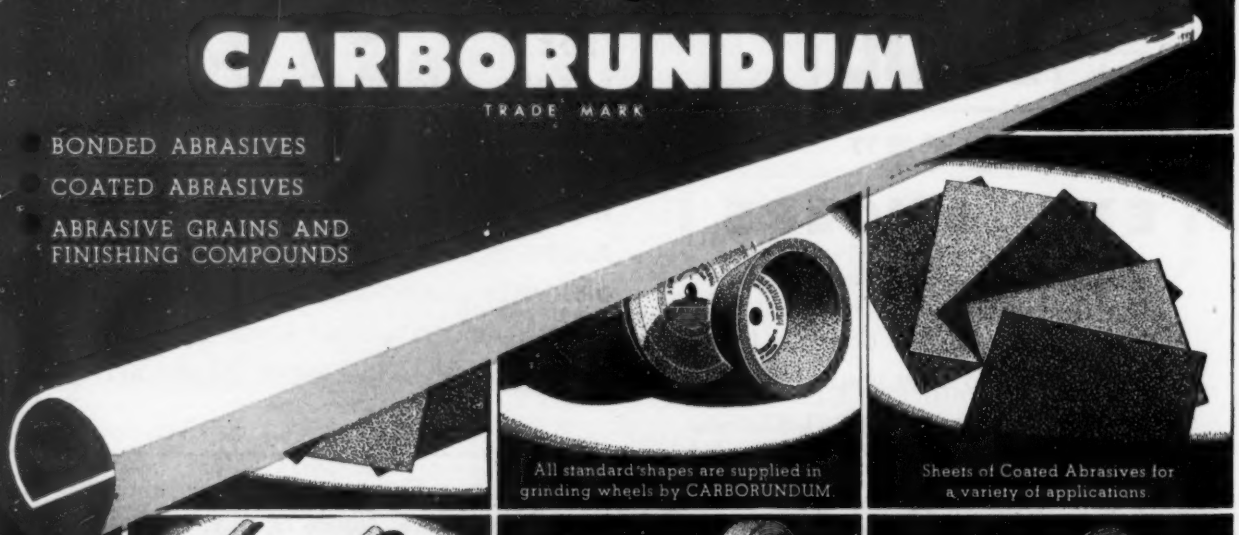
Through an extensive program, The Carborundum Company is making selection and application of the best abrasives to use for specific jobs simpler and more efficient. "Series 20" is a timely example. In a relatively narrow pattern of grits and grades, these wheels cover a wide range of grinding operations. The smaller number and variety of wheels that need be stocked is only one of several important benefits realized.

Easier to specify and order, products by CARBORUNDUM, repackaged and relabelled for fast identification, explain another reason for their growing preference by users of abrasive products. The Carborundum Company, Niagara Falls, New York.

A Good Rule for Good Grinding...CALL IN

CARBORUNDUM
TRADE MARK

- BONDED ABRASIVES
- COATED ABRASIVES
- ABRASIVE GRAINS AND FINISHING COMPOUNDS



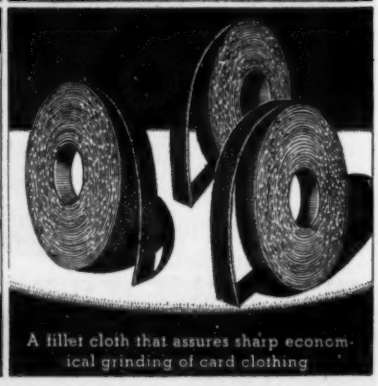
All standard shapes are supplied in grinding wheels by CARBORUNDUM.

Sheets of Coated Abrasives for a variety of applications.

"Carborundum" is a registered trademark which indicates manufacture by The Carborundum Company.

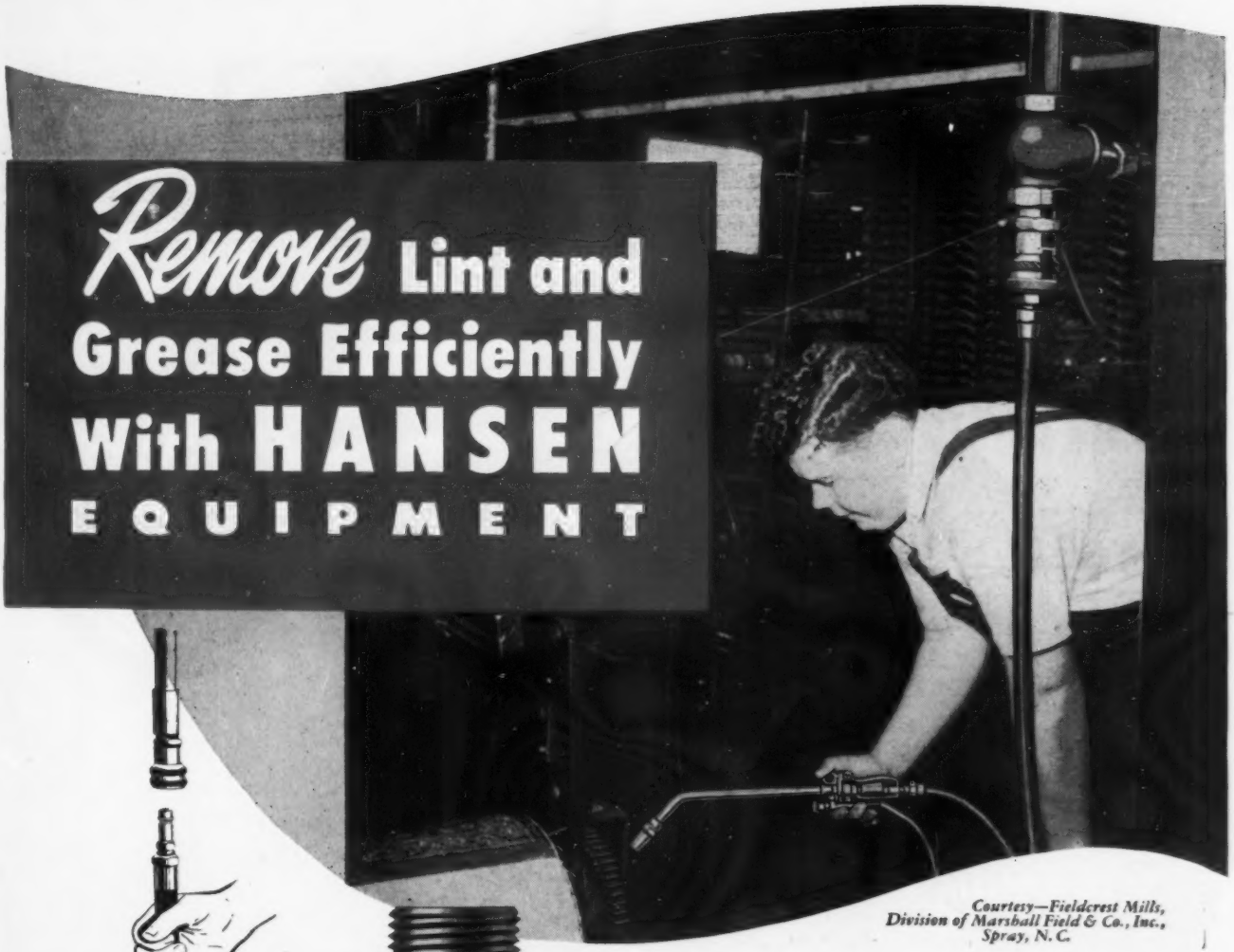
Tool Room sticks and stones that cut fast... last long... and hold their form.

Texalox roll covering grips fabrics firmly, surely but gently.

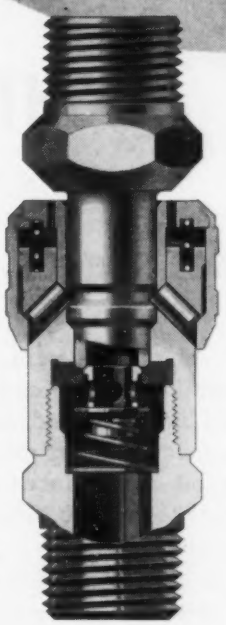


A fillet cloth that assures sharp economical grinding of card clothing.

Remove Lint and Grease Efficiently With HANSEN EQUIPMENT



Courtesy—Fieldcrest Mills, Division of Marshall Field & Co., Inc., Spray, N. C.



● Cleaning looms in weaving mills is a simple matter when the HANSEN cleaning system is used. Lint and fly collections are first blown away by air from the HANSEN Air-Liquid Spray Cleaner. Opening of the liquid valve then admits solvent to the air stream for more complete and thorough cleaning.

A simple movement of the HANSEN quick-connective coupling releases the hose for use at the next air station. Merely pushing the plug into the socket connects the hose. Air is "off" automatically upon disconnection . . . "on" when the hose is plugged in.

The HANSEN system of removing lint and foreign matter from card rooms, spinning frames, winders, twisters, and looms is unequalled. Investigate this economical and efficient method of keeping your equipment free of quality-damaging lint and foreign matter.

Write for new industrial catalog No. 47

HANSEN REPRESENTATIVES

New England States . . . . A. D. Geiger, Belmont, Massachusetts
Southern Ohio, W. Va., Ky.: Steinhagen Airline Products, Dayton, Ohio
Eastern, Southern States . . . . . E-B Engineering Co., Baltimore, Md.
Colorado, New Mexico, Utah, Wyoming: E. C. Wild Co., Denver, Colorado
Southwest Territory . . C. C. Brownfield, Dallas, Texas
Arizona, So. California . . . . . Burklyn Company, Los Angeles, California
Idaho, Oregon, Washington . . . Jack J. Kolberg, Seattle, Washington
Central Western States . . . John Henry Foster Company, St. Louis, Missouri, Minneapolis, Minnesota
Northern Cal., Nevada . . H. E. Lisney Company, Oakland, California
Michigan . . William H. Nash Company, Detroit, Michigan
Indiana, Wisconsin . . Noll Engineering Company, Ft. Wayne, Indiana
Northern Illinois, Eastern Iowa: Walter Norris Engineering Co., Chicago, Ill.
Northern Ohio: F. & W. Ureem Company, Cleveland, Ohio

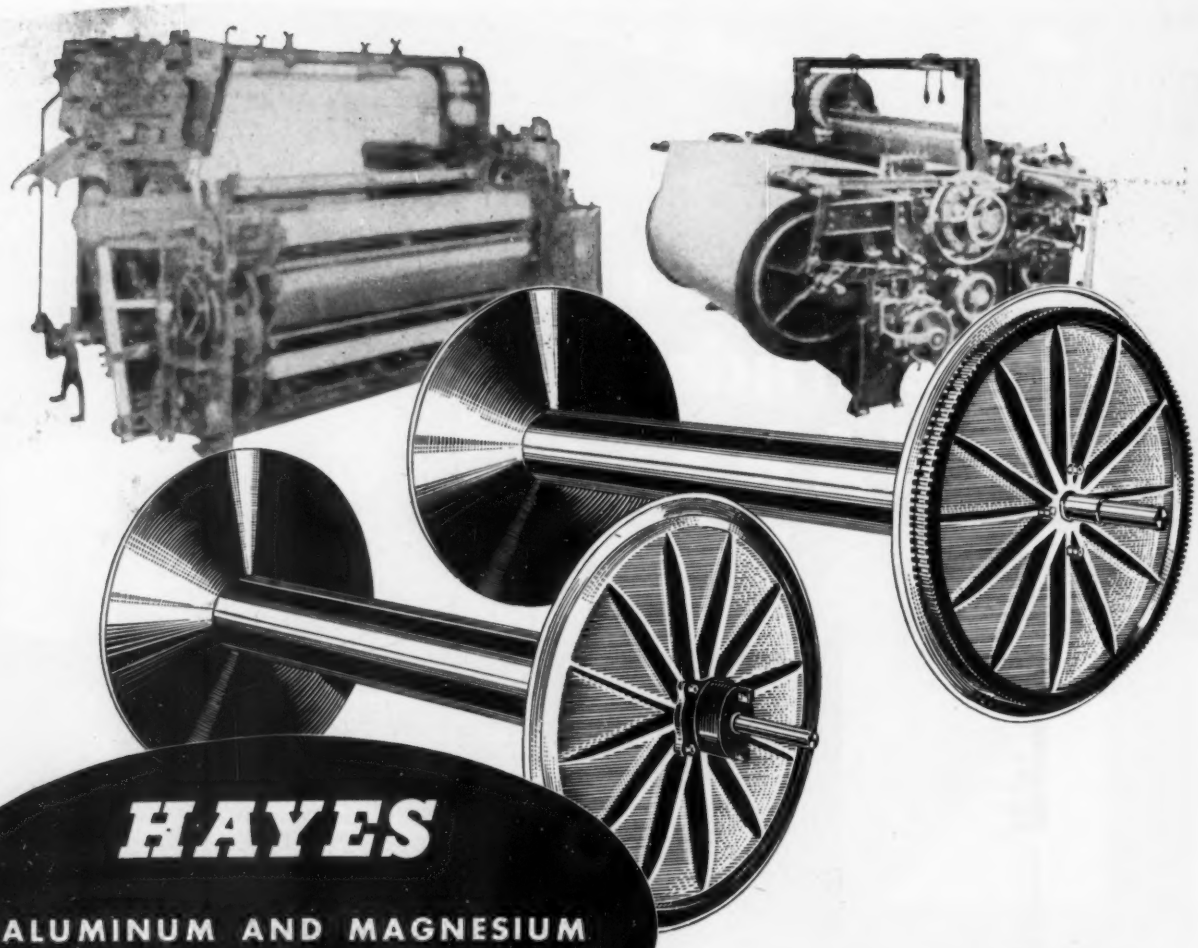
IN CANADA

Province of Ontario . . . . . John Best Associates, Toronto, Ontario
Eastern Canada . . . Cowper Company Ltd., Montreal, Quebec

QUICK CONNECTIVE FLUID LINE COUPLINGS . . .

THE HANSEN MANUFACTURING COMPANY

4031 WEST 150th STREET • CLEVELAND 11, OHIO



HAYES

ALUMINUM AND MAGNESIUM

LOOM BEAMS

LIGHTER WEIGHT

plus

greater strength, higher machine speeds, easier handling

The light metal construction of Hayes Aluminum and Magnesium Loom Beams provides the textile industry with certain definite advantages. Foremost among these is the greatly reduced weight, which is one-half as much as the conventional loom beam. Despite this lightness, Hayes Loom Beams retain the full measure of strength. Beams equipped with thirty-two inch heads permit greater yarn loading and as much as six months weaving time. They may also be obtained in head diameters as small as twenty inches. Hayes Loom Beam heads are designed to have the least possible deflection even when loaded with fine denier acetate yarn. Barrel and head faces are machined to the closest tolerances for accuracy, and have polished, smooth surfaces for protection against catching and breaking the warp. Loom beams are produced with in between head dimensions to suit the Manufacturers' specifications.

Write or wire today for full information on Loom Beams, Tricot Beams and Section Beams. Ask for Catalog 1-21.

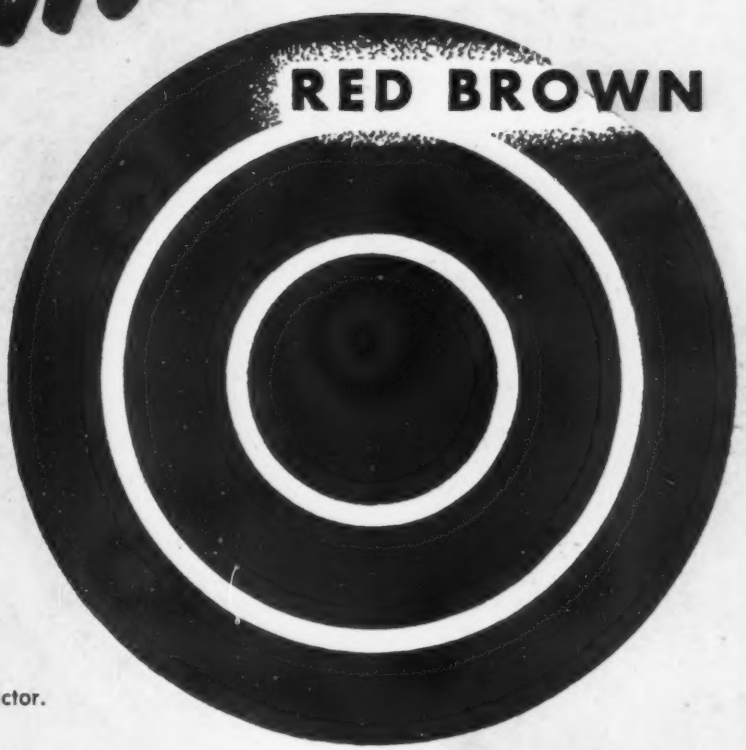
HAYES INDUSTRIES, INC.

HOME OFFICE: JACKSON, MICHIGAN, U. S. A.

AMANTHRENE* VAT COLORS
provide the answer to the demand for
better color fastness in textiles

Amanthrene

RED BROWN



in double paste or
double powder form

An excellent base color for deep chocolate browns and a shading element for taupes and tans where fastness to light, washing, chlorine and perspiration is a factor.

Satisfactorily meets the requirements for slip cover materials, upholstery fabrics, sports wear, and men's work clothes.

Suitable for cotton and rayon yarn in warp, beam and package dyeing equipment, as well as for skein work and hosiery. Well adapted, also, to jig and pad-jig dyeing of piece goods.

Another of the Amanthrene range of superior vat colors. For detailed information on the whole range available, as well as data regarding your own particular requirements, consult our nearest branch. A.A.P. technicians are always happy to be of service.

AMERICAN ANILINE PRODUCTS, INC., 50 Union Square, New York, N. Y. • ***Plant:*** Lock Haven, Pa.
Branches: Boston, Mass. • Providence, R. I. • Philadelphia, Pa. • Charlotte, N. C. • Chicago, Ill. • Los Angeles, Cal.
Chattanooga, Tenn. • **Dominion Anilines & Chemicals Ltd.** • Toronto, Canada • Montreal, Canada

*Reg. U.S. Pat. Off.

BETTER GET READY FOR MACHINE-PICKED COTTON

There is an increasing amount of machine-picked cotton available. It will constantly increase in quantity, as more picking machines are turned out of the new factories recently built to produce them.

This cotton will be cheaper than hand-picked cotton, but much trashier. The cheaper price will force many mills to use this cotton.

Every management of a mill on yarns that can use such cotton should be considering cleaning machinery that can take out the trash.

Many an opening room that is considered good by present standards will not clean machine-picked cotton satisfactorily.

Our Super-Cleaning Systems are particularly effective where good, white, trashy cotton must be raised in grade.

AldricH MachinE WorkS

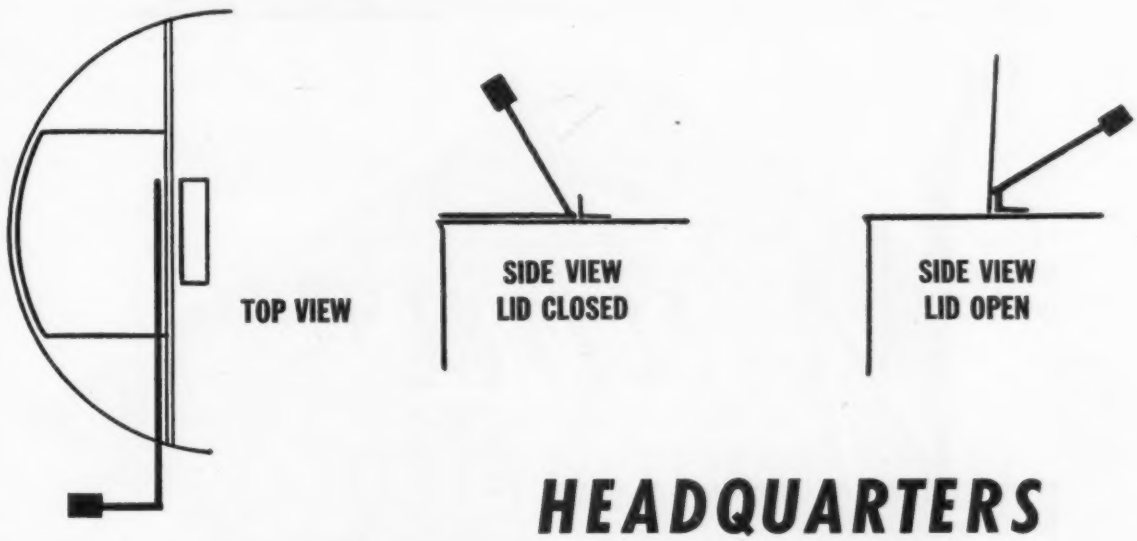
Greenwood, South Carolina

SLASHING HINTS

NO. 1 OF A SERIES

SIZE COOKING EQUIPMENT

Cooking kettle lids can be made easy to handle, so that you don't have to burn a hand or steam a face to open your kettle for a look. The illustration below shows a simple weighted handle that can be welded or riveted to any hinged kettle top. The weight keeps it either open or shut, as you desire.



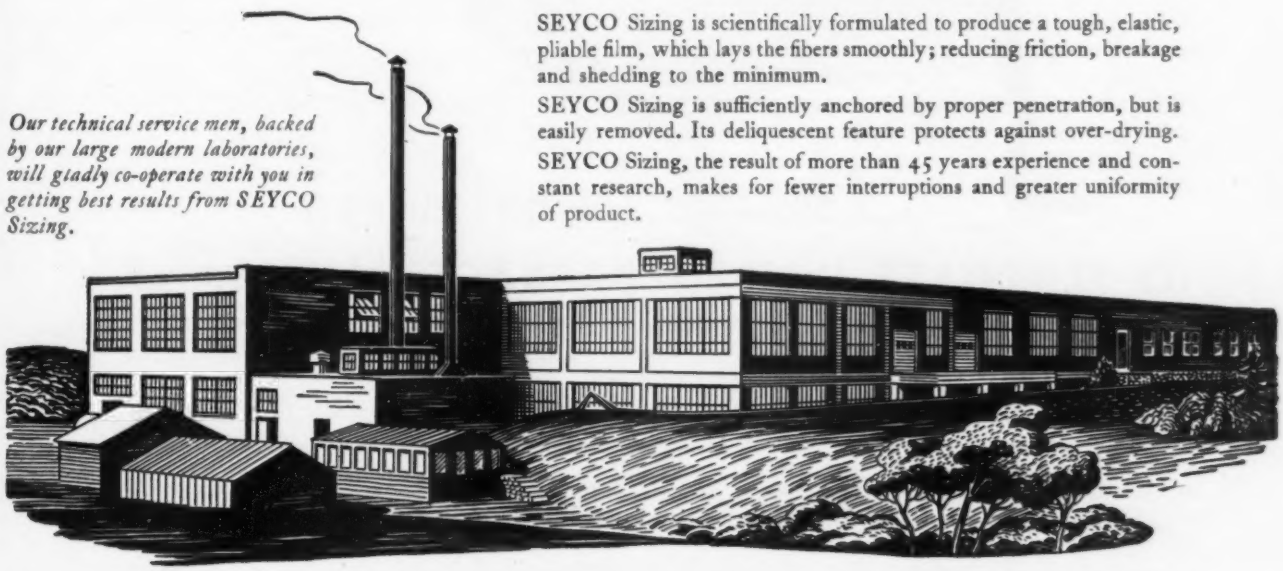
HEADQUARTERS FOR SIZE

Our technical service men, backed by our large modern laboratories, will gladly co-operate with you in getting best results from SEYCO Sizing.

SEYCO Sizing is scientifically formulated to produce a tough, elastic, pliable film, which lays the fibers smoothly; reducing friction, breakage and shedding to the minimum.

SEYCO Sizing is sufficiently anchored by proper penetration, but is easily removed. Its deliquescent feature protects against over-drying.

SEYCO Sizing, the result of more than 45 years experience and constant research, makes for fewer interruptions and greater uniformity of product.



SEYDEL-WOOLLEY & CO.

TEXTILE CHEMICALS

748 RICE STREET • ATLANTA, GA.

SEYCO

PENETRANTS • SIZING • SHUTTLE DRESSING • SOFTENERS • ALKALIS • TWIST SETTER MACHINES •

DESIGNED FOR ONE PURPOSE . . .

TO ELIMINATE UNEVEN PACKAGES AND TAILS

applicable to spinning yarn, also warp spinning

The economy and efficiency of Numo Automatic Spinning Controls has been proved in America's largest textile mills. It offers these major advantages!

- Eliminates the necessity of doffers bearing rail down manually . . . makes doffing easier.
- Eliminates uneven packages from doff to doff.
- Eliminates chokes on spindles.
- Eliminates uneven tails left at butt of bobbins.
- Increases production by saving time at each doff.
- Reduces number of ends down on doff, as well as many other direct savings.
- Uniform packages and tails eliminate the necessity of unraveling long tails and "hunting" for ends. This means less bobbin transfer or breakout, as well as reduction in waste yarn. Once set for desired bobbin size and tail, there will automatically be a duplication on all succeeding doffs.

Write today for illustrated literature showing why more and more mills are turning to NUMO for increased production and lower cost.

NUMO MACHINE & ENGINEERING CO., INC.

CHARLOTTE • NORTH CAROLINA

Floyd Isom
Station C, Box 164
Atlanta, Ga.

The Rudel Mehry, Co., Ltd.
614 St. James St., West
Montreal 3, Canada

Walter S. Coleman
P. O. Box 722
Salisbury, N. C.

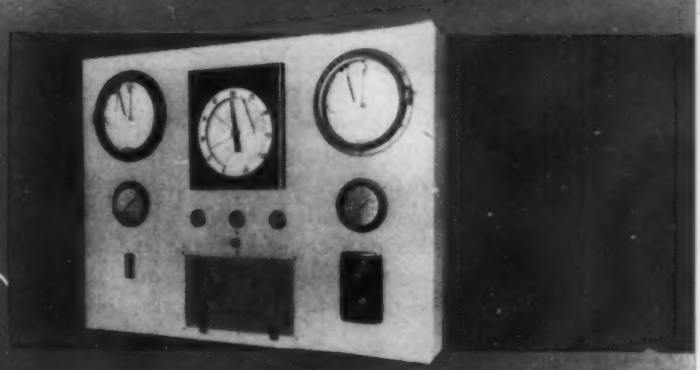
Barnhardt Bros. Export Corp.
P. O. Box 748
Charlotte 1, N. C.

Barnhardt International Corp.
P. O. Box 748
Charlotte 1, N. C.

a faint breath...

even for 1/100th of a second...

. would register a marked variation on our Electronic Recording Thermometers because they are so sensitive. Such precise processing equipment at Althouse safeguards every operation in our own exclusive processes, thereby eliminating "variations and *keeping impurities out* of finished dyestuffs."



Practical production with equipment "throughout the plant" just as sensitive as equipment "in the laboratory" results in PRECISION Dye-Making.

Chemical Company, Inc

READING · PA.

Pace-setter in precision dye-making

FOR YOUR INFORMATION

Woolen and worsted spinners adopt SYTON to lower production costs!

More and more mills are adopting Syton . . . confirming Monsanto's basic leadership in inventing and developing silica sols for spinning.

Syton's advantages stem from 10% to 30% increased yarn strength in woolens *and* worsteds!

FASTER PRODUCTION Because of increased yarn strength, the amount of twist can be reduced and production thereby speeded.

LOFTIER YARNS Less twist means loftier yarns, with tensile strength equal or better than the strength of untreated yarns of higher twist.

FINER YARNS WITH ALL GRADES Higher counts—closer to limit spin—for all grades of stock can be attained with Syton-treated yarns.

FEWER ENDS DOWN Reductions in ends down range from 25% to 50% depending on the grade of wool.

BETTER SPINNING EFFICIENCY Syton produces more uniform yarn with less beard and thin spots, reduced fly waste, and better drafting.

We have reports from many mills that confirm these advantages . . . a very practical reason why you should look into Syton now. For information and technical help, just check the handy coupon at 1.

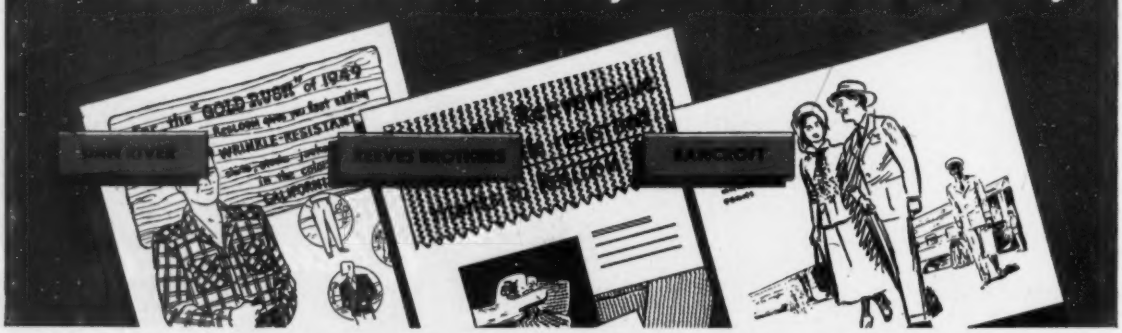
A retail success important to MILLS WRINKLE-RESISTANT cotton . . . with RESLOOM

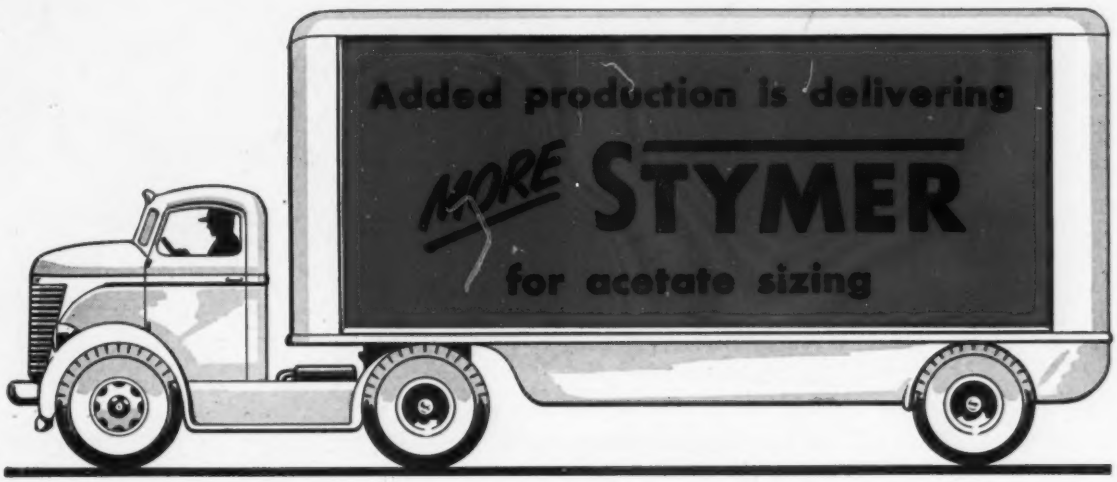
Farsighted cotton men are taking a long look at the retail market where Resloom wrinkle-resistance is a new, extra sales feature that's moving goods faster. The conclusion is plain:

Wrinkle-resistance is a new sales plus for mills . . . as well as for their customers. And wrinkle-resistance becomes a sales *must* when the market changes and consumer resistance is up!

All the wrinkle-resistant cottons on the market today are achieved with Monsanto's Resloom. Doesn't that suggest the easiest way to give your fabrics this sales advantage? For information and technical help with Resloom just send the handy coupon checked at 2.

RESLOOM is proved on the market by these cottons advertised by:





Just a few months after Stymer passed its first mill trials, demand outstripped supply. Mills tried it, liked it . . . and waited for it. We're thankful for their patience and glad to report substantial new production facilities. Now partly-filled orders will become fully-filled orders. And Stymer will be available to additional mill users desiring a fine, new sizing agent which gives outstanding practical results in slashing acetate warps.

What STYMER offers

1 **EASILY APPLIED** in a uniform coating on the individual yarn.

2 **ADHERES** well to the fiber.

3 **EASY TO SCOUR** from the woven fabric in warm water containing alkali and a detergent.

4 **REDUCES STATIC**

5 **FILM SHOWS** exceptional strength, abrasion resistance, smoothness and flexibility.

IN SLASHING, Stymer does not stick to uncovered dry cans, eliminates static electricity, separates easily at the lease rods and does not gel in the pipes or size box.

IN WEAVING, the Stymer-sized warps exhibit little or no shedding, maintain yarn twist, have fewer end breaks and produce a more uniform fabric. For information just send the handy coupon checked at 3.

Syton, Resloom, Stymer: Reg. U. S. Pat. Off.

MONSANTO
CHEMICALS — PLASTICS

MONSANTO CHEMICAL COMPANY, Textile Chemicals Department
Desk TIT 11, 140 Federal Street, Boston 10, Mass.

Please send me information on, ☐ *1,* ☐ *2,* ☐ *3.*

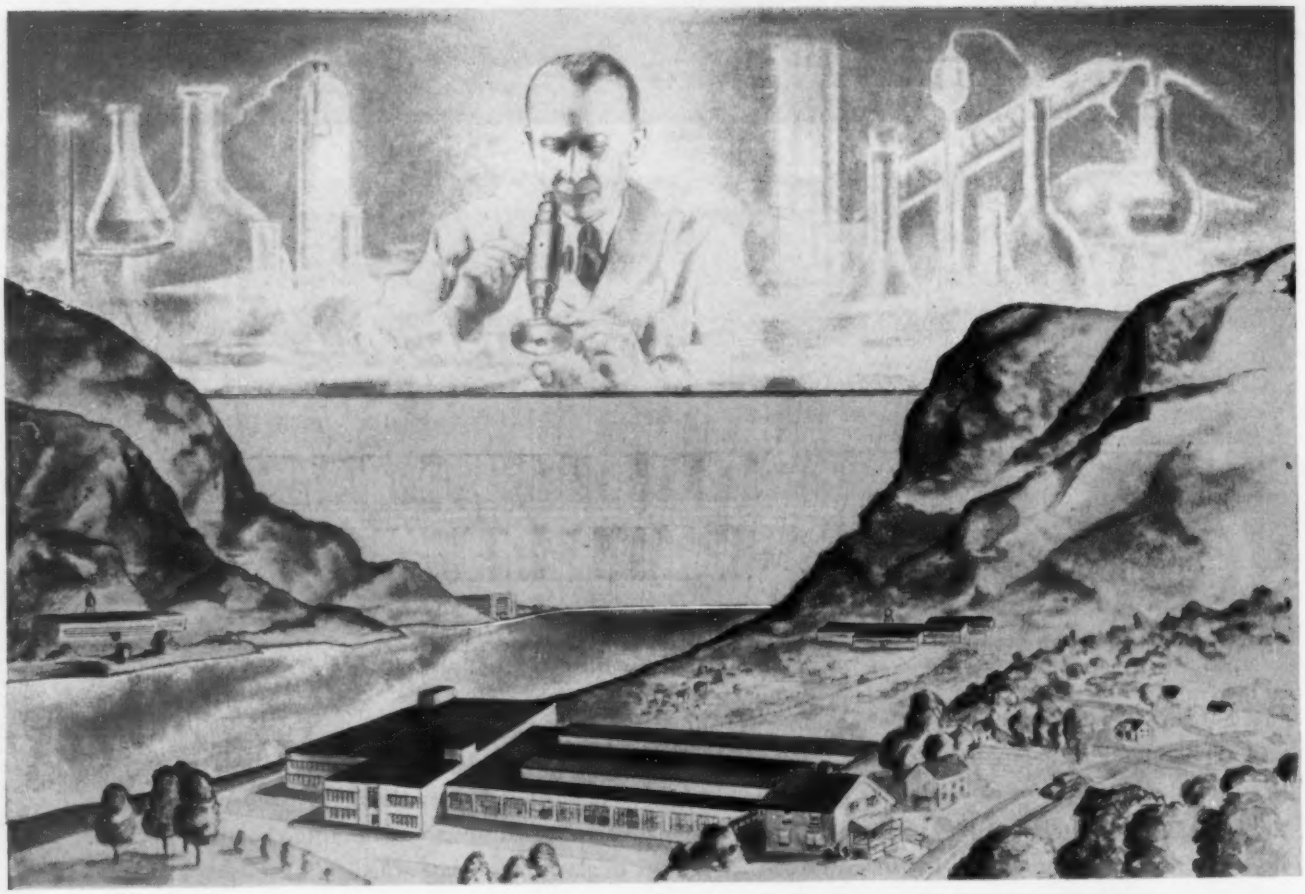
Name _____ Title _____

Firm _____

Address _____

City _____ State _____

SERVING INDUSTRY . . . WHICH SERVES MANKIND



YOU PROFIT

when the dam fills up

Men in the mills generously lending their time and machines for actual operating tests . . . Terrell field men everlastingly finding out why and supplying information to Denman Research Engineers . . . Men in Laboratories, by test and trial, discard and re-trial, patiently finding the answer to your picker problems—these sources are continuously filling the Denman-Terrell reservoir of knowledge.

Each time the dam fills up, You Profit Because, again, Denman

Made by
DENMAN TIRE & RUBBER CO.
MANUFACTURERS OF
THE FAMOUS
DENMAN LOOP PICKERS

BRINGS YOU THE BEST . . . FIRST

EXCLUSIVE SALES AGENTS . . .

The TERRELL COMPANY, Inc.

CHARLOTTE, N. C.

SYN-O-TOL "LT"
Liquid synthetic detergent and penetrant for kiering, scouring and dye leveling.
SOLUBLE LUXOLENE
Sulfated synthetic ester for exquisite finishing of fine fabrics.
CATION SOFTENER 686-C
Durable finish that does not yellow whites or pastels.
DREW Tested
YOUR ASSURANCE OF EXCELLENCE
CORASIL RT
For rayon warp sizing and crepe soaking.
TEXTILE OIL #522
Special sulfated refined vegetable oil. Dye assistant and finishing oil.
QUIXITE T
Anionic synthetic detergent powder for scouring and print washing.

OUTSTANDING PRODUCTS FOR COTTON AND RAYON PROCESSING

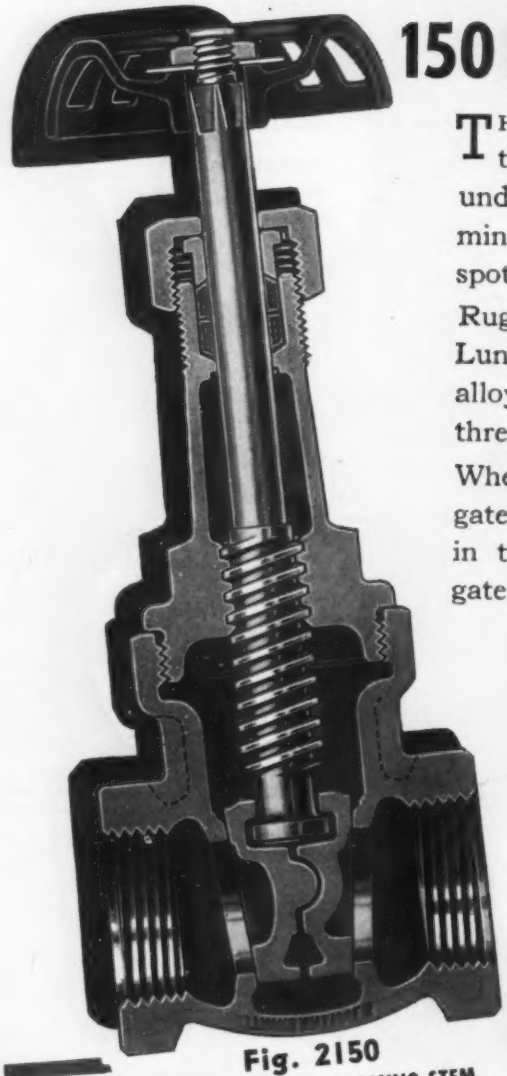
E. F. DREW & CO., INC.

15 East 26th Street, New York 10, N. Y.
FACTORY & LABORATORIES: BOONTON, N. J.
BRANCH OFFICES
Chicago • Boston • Greenville, S. C. • Montreal, Canada
Rio de Janeiro, Brazil • Buenos Aires, Argentina

"LIKE HAVING THREE VALVES IN ONE"

LUNKENHEIMER

150 lb. S.P. BRONZE GATE VALVES



THE enthusiasm of maintenance men *and* engineers for the Lunkenheimer new 150 lb. Bronze Gate Valves is understandable. Actually, a simple interchange of trimmings provides, from minimum stocks, a valve for every spot where a 150 lb. Bronze Gate Valve is needed.

Ruggedly designed throughout, each valve features the Lunkenheimer developed and patented wear-resistant alloy stem material which eliminates failures due to stem thread wear.

Whether you have one . . . or thousands of 150 lb. bronze gate valves in your plant, you'll find definite advantages in the LUNKENHEIMER Fig. 2150 line of 150 lb. gate valves.

PHONE YOUR DISTRIBUTOR . . .

Design, construction and interchangeability are fully illustrated and described in Circular 574. Ask your distributor for a copy or write us direct.

ESTABLISHED 1862

THE LUNKENHEIMER CO.

"QUALITY"

CINCINNATI 14, OHIO. U. S. A.

NEW YORK 13 CHICAGO 6 BOSTON 10 PHILADELPHIA 34

EXPORT DEPT. 318-322 HUDSON ST., NEW YORK 13, N. Y.

Fig. 2150
DOUBLE WEDGE DISC, RISING STEM

See Our Exhibit at the 18th National Exposition of Power and Mechanical Engineering. Booth #52, Grand Central Palace, New York. November 29th - December 4th.

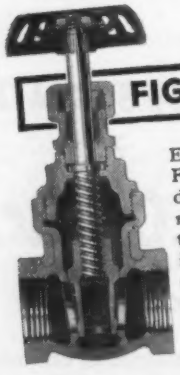


FIG. 2153...

Embodies all the features in Figs. 2150 and 2151, but its design is varied to provide non-rising stem operation. Body is the same thus requiring only an interchange of trimmings, to convert from the non-rising stem to the rising stem valve.

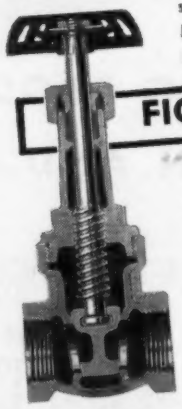


FIG. 2151...

SOLID WEDGE DISC. The solid disc is ideal for services such as food processing lines and handling gummy substances, where entrapment of line materials within the disc is undesirable.

Southern Sizing Company

P. O. BOX 167, ATLANTA, GEORGIA

Announces the Appointment of

Bryant Chemical Corporation

Textile Consultants and Manufacturing Chemists

6 NORTH ST., NORTH QUINCY, MASS.

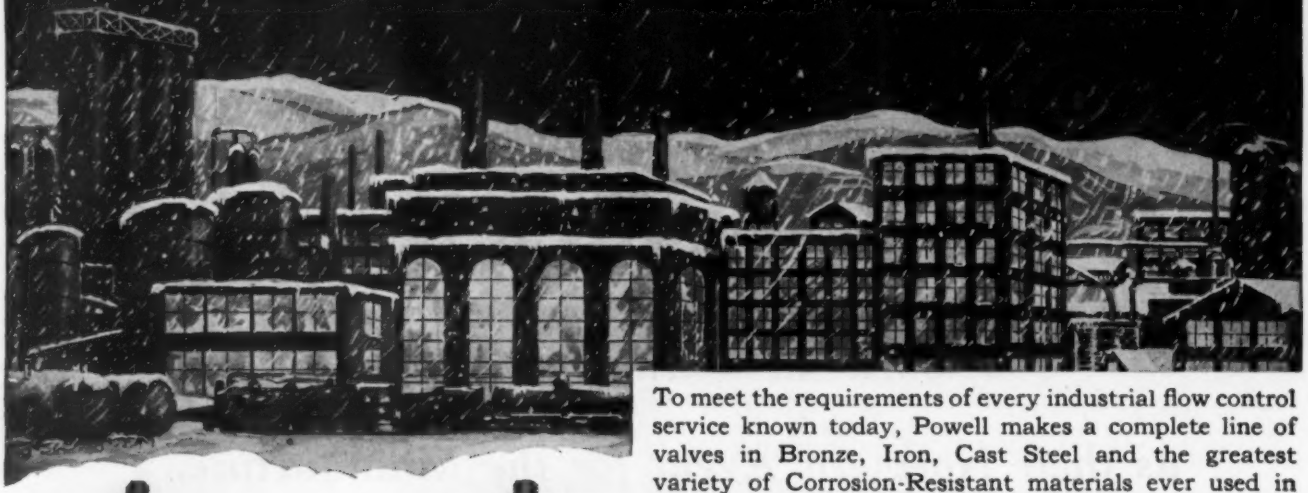
as their Northern Agent for the Manufacture, Sales and Servicing of

SLIX is the registered trade mark for the new type warp lubricant designed for application separately from the starch film under the process patented in the U. S. Patent No. 2,074,745.

SLIX imparts surface lubrication to the shuttle and other loom parts which effects a marked reduction in warp stops—and more amazingly, a similar reduction in filling stops. Increased production and improved quality are obtained by the greater weavability afforded starch-sized warp yarns.

SLIX, a milk-white emulsion of high melting point fats and fatty matter, completely fills all the requirements of preservation, mildew-inhibition and hygroscopity. Combined with the feature of being more easily removed in the desizing operation because it is hot water extractable, SLIX is proving the ideal one-piece liquid sizing for cotton and spun rayon yarns.

POWELL VALVES cover all Industry



To meet the requirements of every industrial flow control service known today, Powell makes a complete line of valves in Bronze, Iron, Cast Steel and the greatest variety of Corrosion-Resistant materials ever used in making valves.

We cannot introduce "Powell Valves for Corrosion Resistance" as a *new* feature, because with us they are long past the introductory stage. In fact it was more than 25 years ago that the Powell Special Design and Alloy Valve Division was established.

But we *can* feature the fact that today Powell makes the only *complete line* of Corrosion-Resistant Valves available to the Chemical and Process Industries.

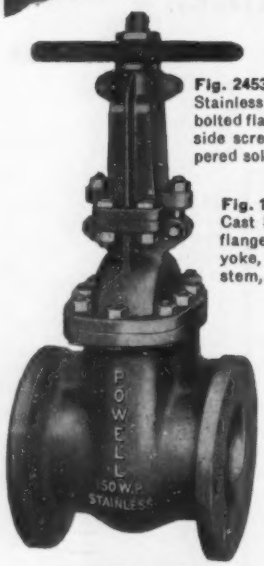


Fig. 2453-G—Large 150-pound Stainless Steel Gate Valve with bolted flanged yoke bonnet, outside screw rising stem and tapered solid wedge.

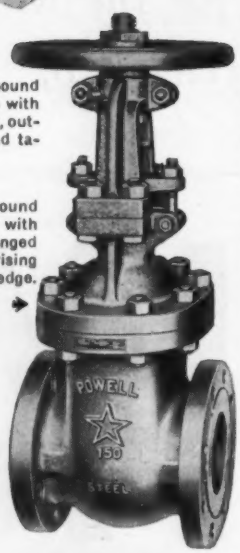


Fig. 1503—Class 150-pound Cast Steel Gate Valve with flanged ends, bolted flanged yoke, outside screw rising stem, tapered solid wedge.

Fig. 1843 — 200-pound Monel Metal Swing Check Valve with screwed ends, screwed-in cap.

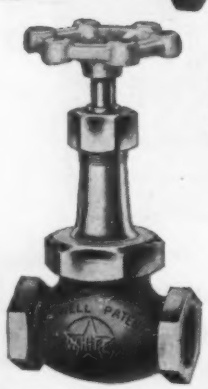


Fig. 1708—200-pound Bronze Globe Valve with screwed ends, union bonnet, renewable, specially heat treated stainless steel seat and regrindable, renewable, wear-resisting "Powellium" nickel-bronze disc.

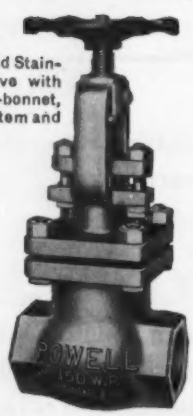


Fig. 1968—150-pound Stainless Steel Gate Valve with bolted flanged yoke-bonnet, outside screw rising stem and tapered solid wedge.

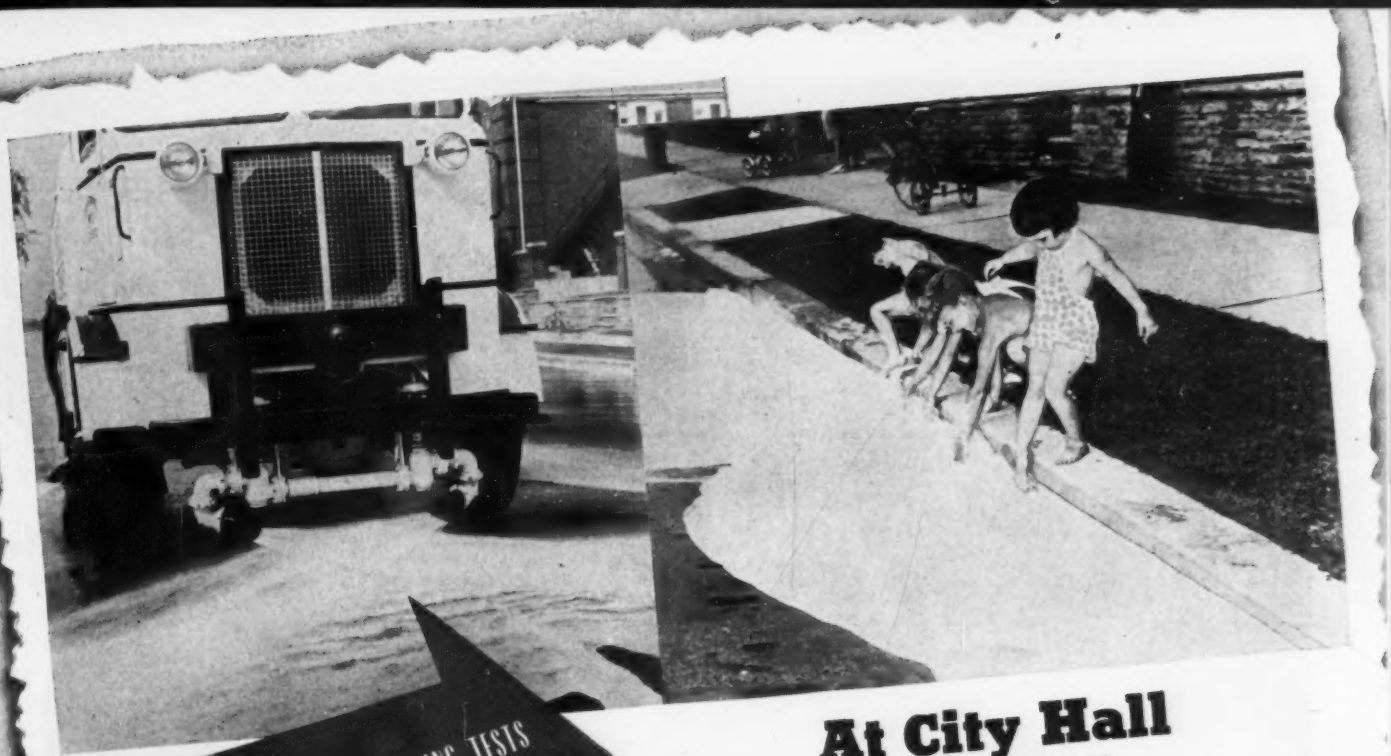
Fig. 2051-NI—150-pound Nickel "Y" Valve with flanged ends, bolted flanged yoke and outside screw rising stem.

Fig. 1793.—Large 125-pound Iron Body Bronze Mounted Gate Valve with outside screw rising stem, bolted flanged yoke and tapered solid wedge. Also available in All Iron for process lines.

The Wm. Powell Co., Cincinnati 22
DISTRIBUTORS AND STOCKS IN ALL PRINCIPAL CITIES

For full information on applications of Powell Corrosion-Resistant Valves, refer to Powell Catalog No. 242. If you do not have it, write, on company stationery, for your copy NOW!

POWELL VALVES



IN ACTUAL TORONTO STREET-CLEANING TESTS
OIL, GREASE AND GRIME
COMPLETELY REMOVED BY
0.03% NACCONOL NR SOLUTION

At City Hall

By FRANK TUMPANE

Bubble Bath Bradley

Bubble-Bath Bradley, Inc., they call him now.

Harold D. Bradley, the ebullient Street Cleaning Commissioner, went right out and gave Bayview Ave. the beauty treatment yesterday He promised he would clear the thoroughfare of dust, grime and oil, and he did.

The big flusher started slowly down Bayview and the nozzles belched the stuff, known as Nacconol Within feet, the stream of water blew up into bubbles which turned into suds, which swept the street clean. It foamed in great mounds upon the curbstones. Some of the mounds were more than a foot high.

Children ran to the curb and began prancing in the suds while Commissioner Bradley nodded approvingly. The Nacconol washed

THE GLOBE AND MAIL

NACCONOL* NR

AMERICA'S LEADING SYNTHETIC DETERGENT

COSTS LESS THAN SOAP

DOES MORE THAN SOAP

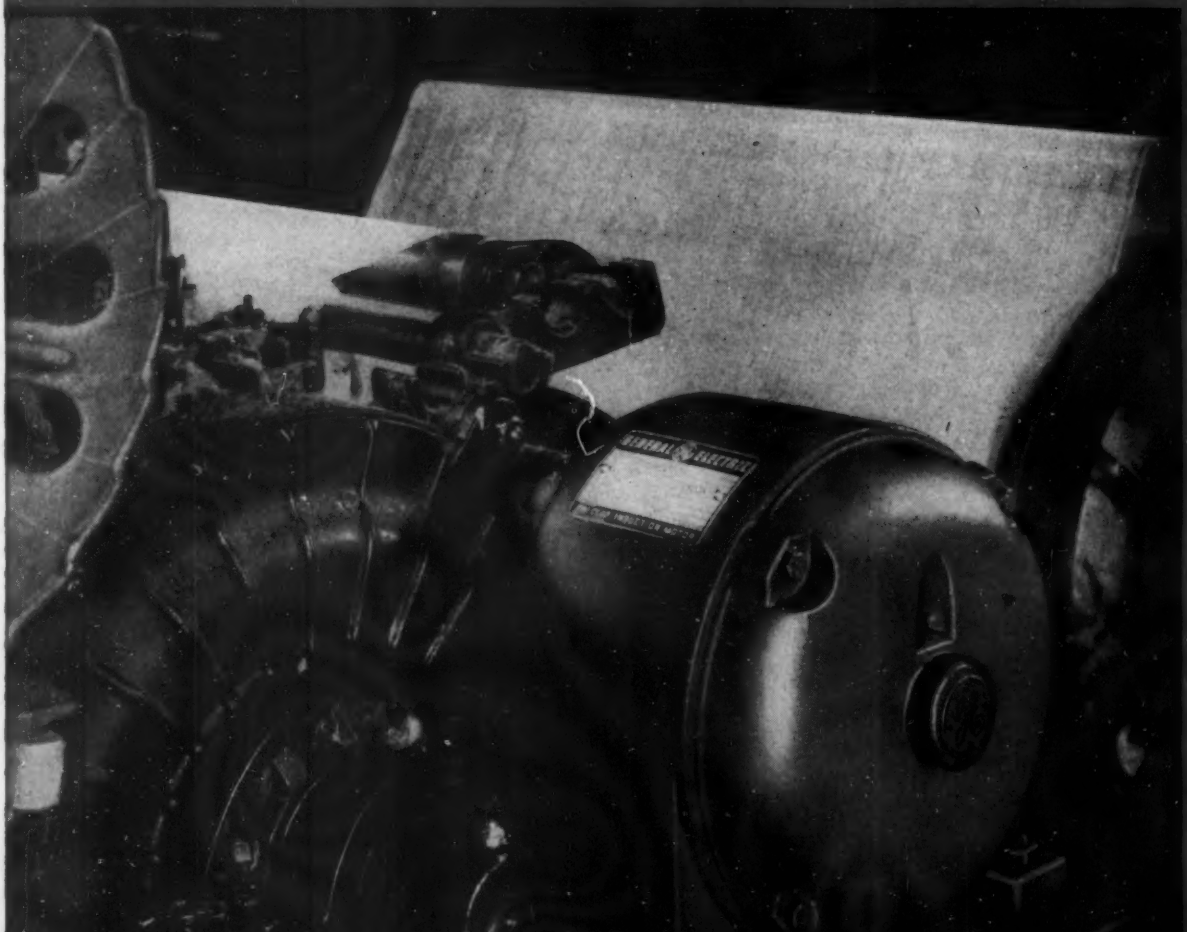
Let us show you how much NACCONOL NR can save on your most difficult washing job.

NATIONAL ANILINE DIVISION • ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR ST., NEW YORK 6, N. Y. • BOSTON • PROVIDENCE • PHILADELPHIA • CHICAGO • SAN FRANCISCO • PORTLAND, ORE. GREENSBORO • CHARLOTTE • ATLANTA • NEW ORLEANS • CHATTANOOGA • TORONTO

*Reg. U.S. Pat. Off.

built the way a



GENERAL ELECTRIC

loom likes it!

...that's why the new G-E loom motor increases output—costs less to maintain

The new G-E loom motor is backed by one of the most comprehensive development programs ever undertaken for a motor of this type. Loom design factors like weight of lay, travel of lay, picks per minute, weight of shuttle, etc., were carefully studied so that the electrical and mechanical characteristics of the new motor would meet the exacting demands of loom service. The result is a motor "built the way a loom likes it". In your mill it will produce these two important advantages:

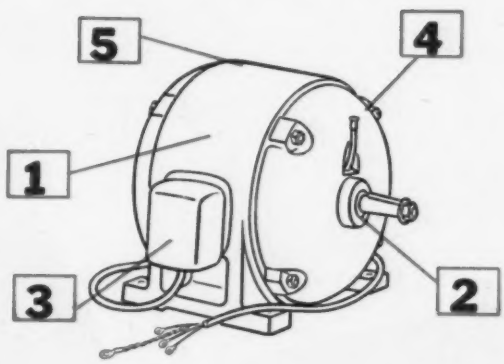
INCREASE YOUR PRODUCTION!

This new motor maintains a high sustained speed throughout the pick cycle. This contributes to maximum production from looms. Moreover, the rugged construction means little time out for repairs.

CUT YOUR MAINTENANCE COSTS!

The totally-enclosed cast-iron construction of this motor—plus new-type steel-backed bronze bearings enables it to withstand the rigors of loom service. Accessible oilers on large capacity bearing reservoirs simplify lubrication.

The new G-E loom motor (40° C rise) is now available in ¾, 1, 1½, and 2 horsepower ratings. Mail the coupon today for Bulletin GEA-5011 which gives detailed analysis of the motor, frame dimensions, etc. *Apparatus Department, General Electric Company, Schenectady 5, N. Y.*



THESE FEATURES MAKE G-E LOOM MOTORS A REAL BUY!

1. A rugged, totally enclosed, cast-iron frame which is shorter, takes up less aisle space.
2. Larger diameter, wool packed, steel-backed bronze bearing linings for greater capacity and longer life.
3. Roomy, two-piece conduit box will accommodate either S. O. cord, or conduit system (when suitable fittings are used). Motor furnished with 4 feet of 4-conduit Flamenol*cable.
4. A pinion-end bearing that's easier to lubricate.
5. All ratings with a single diameter frame to make it easy to change ratings as production demands vary.

TOTALLY ENCLOSED

LOOM MOTORS

Lint-free and cast-iron!

*Reg. U.S. Pat. Off.

General Electric Company, Section D661-32
Apparatus Department, Schenectady 5, N. Y.

Please send without obligation a copy of your Bulletin GEA-5011 which describes the new G-E totally-enclosed 40° C rise loom motor.

Name_____

Address_____

City_____ State_____

SINCE 1905, FOR 43 YEARS, OLD DOMINION HAS BEEN PRODUCING *QUALITY* PACKAGES

QUALITY...The Lasting Symbol

QUALITY is the lasting symbol of performance built into every package by the craftsmen of OLD DOMINION. The unseen ingredient of better packages, it largely accounts for the mutual loyalty of Old Dominion and its clients. Throughout the years we have enjoyed to the fullest this loyalty and guarded it zealously through fair dealing, quick service and mutual confidence.

For quality packaging, consult Old Dominion ... for generations, designers and manufacturing craftsmen of better boxes. Write today to Dept. 107 for an illustrated booklet showing Old Dominion's quality packages.

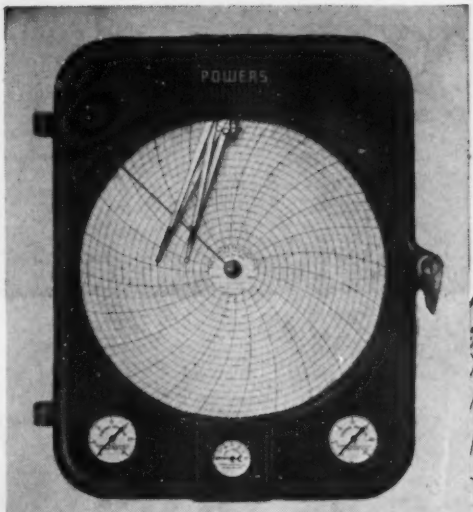
OLD DOMINION *Box Company Inc.*

PLANTS LOCATED THROUGHOUT THE SOUTH

CHARLOTTE, N. CAROLINA

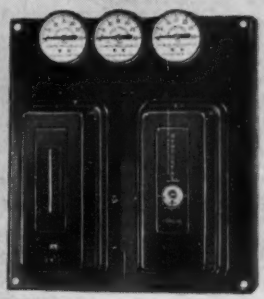
THE SOUTHERN BOX MAKER WITH A NATIONAL REPUTATION

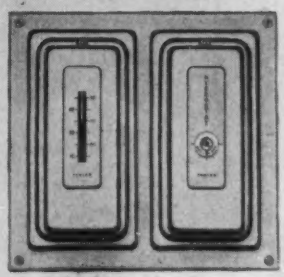
Want More Accurate HUMIDITY Control?



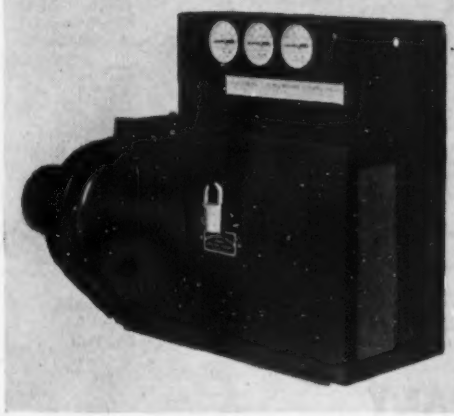
POWERS WET and DRY BULB RECORDER REGULATOR

At Right
HYGROSTAT and THERMOSTAT COMBINATION for Exposed Piping
•
Below
HYGROSTAT and THERMOSTAT for Concealed Piping





Below—Powers Aspirator Box containing Hygrostat and Thermostat over which is drawn, by suction fan at left, a stream of air filtered by fine screens. Widely used in Textile Mills and suitable for other industries.



Only a few of our many different types of Humidity Controls are shown here. For further information phone or write our nearest office.

HY2

Above
ROOM HYGROSTAT for Concealed Piping
At Left
ROOM HYGROSTAT for Exposed Piping • Above DUCT HYGROSTAT

POWERS Type 190 HYGROSTATS

may help solve one of your difficult problems

POWERS new type 190 Hygrostat is pneumatically operated and sensitive to the slightest changes in relative humidity. Users state "it is the most accurate hygrostat made."

Controls valves or dampers in connection with heating or cooling coils, humidifiers, air washers, humidifying atomizers, spray nozzles, etc.

Used in processing and storage rooms in textile mills, industrial plants, laboratories, printing plants, telephone exchanges, and comfort air conditioning systems in all types of buildings.

Use these modern hygrostats to replace obsolete or inaccurate controls.

Points of Superiority: 1. Precise control and quick acting response to slight changes in relative humidity. 2. Reliable operation and maintenance of calibration over long periods of time. 3. Modern design, compact and efficient. 4. Sensitivity adjustment. 5. Unusual resistance to vibration. 6. Requires a very small amount of compressed air for its operation. 7. Easy to install.

Phone or write our nearest office for Bulletin 302

ATLANTA 3, GA., 142 Spring St., N.W. • BOSTON 15, MASS., 125 St. Botolph St. • GREENSBORO, N. C., 1034 Jefferson Standard Bldg. • NEW YORK 17, N. Y., 231 East 46th Street • PHILADELPHIA 32, PA., 2240 N. Broad St. • CHICAGO 14, ILL., 2720 Greenview Ave. • LOS ANGELES 5, CAL., 1808 W. Eighth Street.

THE POWERS REGULATOR CO.

OFFICES IN 50 CITIES • SEE YOUR PHONE BOOK

Over 55 Years of Temperature and Humidity Control

CROUSE-HINDS

offers a wide variety of highest quality electrical products for the

TEXTILE INDUSTRY

CONDULETS*

The illustrations show a representative selection from the thousands of types and sizes that are listed in Crouse-Hinds Condulet catalog. There is a wide variety of highly specialized types in each classification: CONDULETS for use in non-hazardous locations; VAPORTIGHT CONDULETS for use where exposed to weather, moisture, steam or non-combustible dust; DUST-TIGHT CONDULETS for use where combustible dust creates hazardous conditions; and EXPLOSION-PROOF CONDULETS for use in flammable atmospheres.

FLOODLIGHTS

Floodlights provide the most efficient method of lighting industrial yards, auto parking lots, athletic fields and play grounds. Usually it will cost much less to project light a considerable distance with Crouse-Hinds floodlights than to run cable and install local lighting.

The illustrations show two of the most widely used floodlights selected from the dozens in Crouse-Hinds complete line.

Write for additional information.

**CONDULET is a coined word registered in the U. S. Patent Office. It designates a product made only by the Crouse-Hinds Company.*

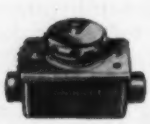
Type C Obround Condulet

Type GRF Condulet

Type FS Vaportight Push Button Station Condulet

Type LB Obround Condulet

Type UNH Hook Flexible Fixture Hanger



Type FSC Vaportight Plug Receptacle Condulet

Type ALC Cushion Flexible Fixture Hanger

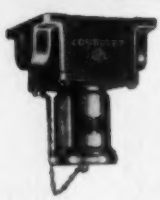
Type UNJ Ball Flexible Fixture Hanger

Type AHG Vaportight Flexible Fixture Hanger

Type FOH Hanger for Fluorescent Lighting Fixtures

Type VS Vaportight Hand Lamp with Rubber Handle

Type MDB Floodlight 500 – 1000-Watt



Type ARRC Condulet with Arktite Receptacle and Threaded Cover

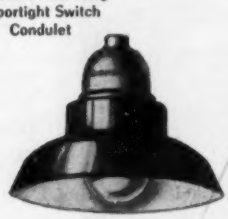
Type MUA Alumalux Floodlight 750 – 1500-Watt

Type DVSP Dust-Tight and Vaportight Panelboard

Type FSC Two-Gang Vaportight Switch Condulet

Type EVA Explosion-Proof Lighting Condulet

Type DLA Dust-Tight Lighting Condulet 100 – 200-Watt



Type VDA Vaportight Lighting Condulet 50 – 200-Watt

Type VDB Vaportight Lighting Condulet 300 – 500-Watt

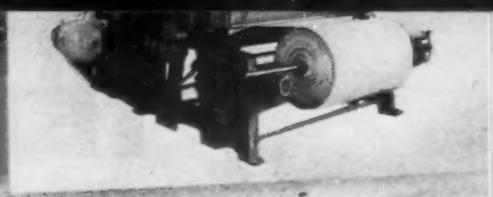
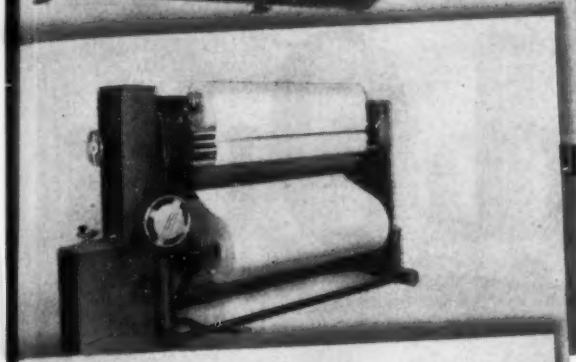
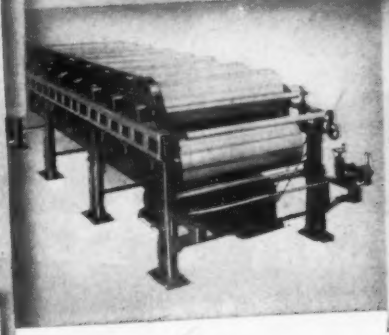
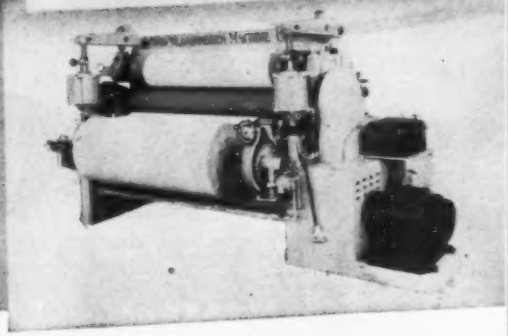
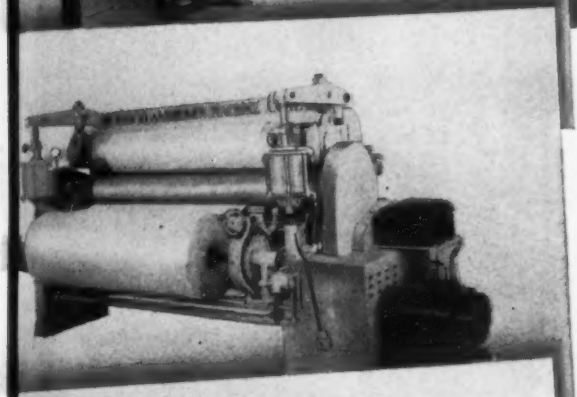
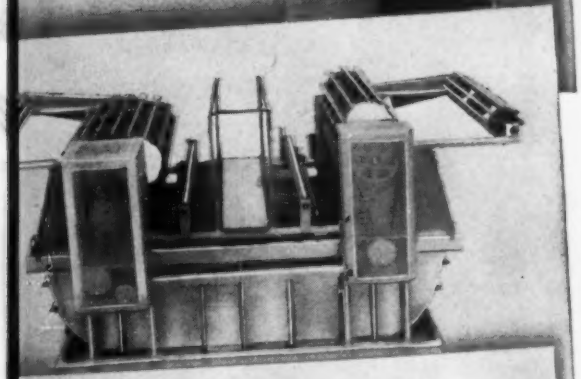
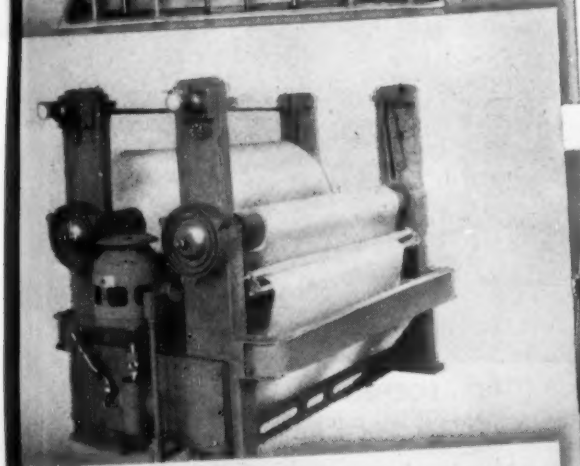
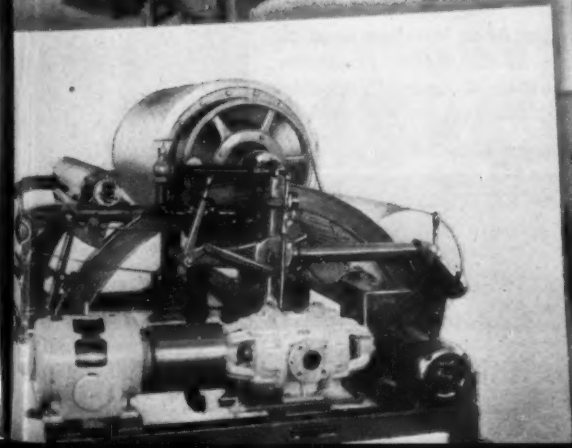
A Nationwide Distribution Through Electrical Wholesalers

CROUSE-HINDS COMPANY

Syracuse 1, N. Y.

Offices: Birmingham — Boston — Buffalo — Chicago — Cincinnati — Cleveland — Dallas — Denver — Detroit — Houston — Indianapolis — Kansas City — Los Angeles — Milwaukee — Minneapolis — New York Philadelphia — Pittsburgh — Portland, Ore. — San Francisco — Seattle — St. Louis — Washington. *Resident Representatives:* Albany — Atlanta — Baltimore — Charlotte — New Orleans — Richmond, Va. CROUSE-HINDS COMPANY OF CANADA, LTD., *Main Office and Plant:* TORONTO, ONT.

CONDULETS · TRAFFIC SIGNALS · AIRPORT LIGHTING · FLOODLIGHTS

CHOSEN by the LEADERS

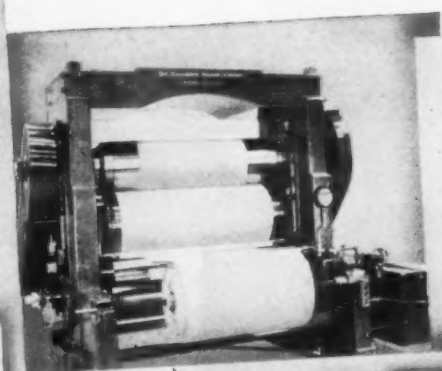
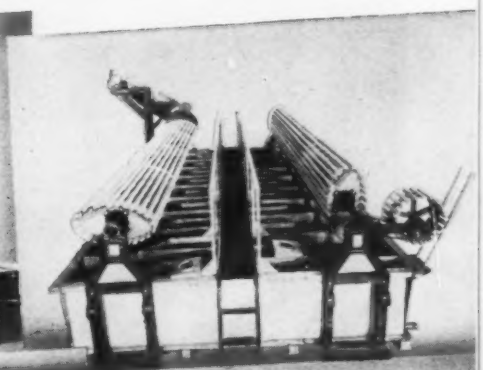
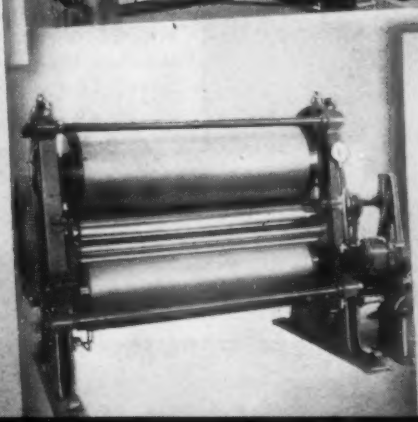
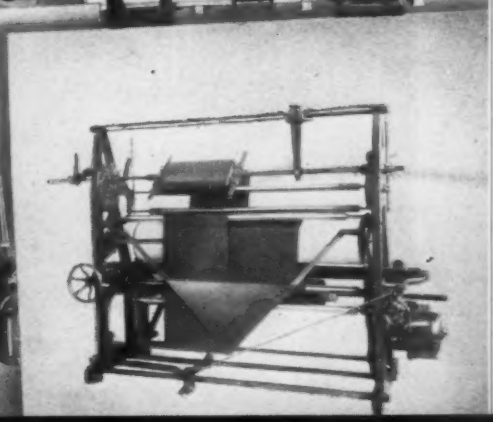
Wherever quality of finished goods is a prime consideration, Van Vlaanderen equipment has been preferred for nearly a half century. Many of America's most successful fabric processing companies have standardized on Van Vlaanderen machines.

Our engineers will be glad to consult with you whether you need a single machine or the design for an entire plant.

VAN VLAANDEREN MACHINE COMPANY

370 Straight Street, Paterson 3, New Jersey

World's largest manufacturer of machines for processing modern fabrics

"TEXROPE Vari-Pitch Boosted Our

CARON SPINNING CO., ROCHELLE, ILL. Vari-Pitch Speed Changers driving a line of spinning frames. A total of 22 Vari-Pitch Speed Changers has been installed since the original order in 1943. Ralph Finkboner, spinning room foreman, says, "Vari-Pitch Speed Changer is the best on the market."

Texrope and *Vari-Pitch* are Allis-Chalmers trademarks.

SPEED CHANGERS "Production" —SAYS MILL FOREMAN

WHEN TEXROPE Vari-Pitch Speed Changers replaced another type of drive in this Illinois worsted mill, production on the spinning frames shot upward. Speed could be adjusted while the machines were running, adding valuable production time. Frames could be operated at highest production rate because speed could be regulated accurately to within a few RPM at the turn of a handwheel. The initial installation was so profitable that Texrope Vari-Pitch Speed Changers drive all spinning frames in this mill.

Texrope Vari-Pitch Speed Changers give you smooth power and infinitely variable speeds over a range of 375%. Simple design and Texrope V-belt drive make them clean running and easy to maintain. Texrope Vari-Pitch Speed Changers will save you money wherever close speed control and quick speed changes are required.

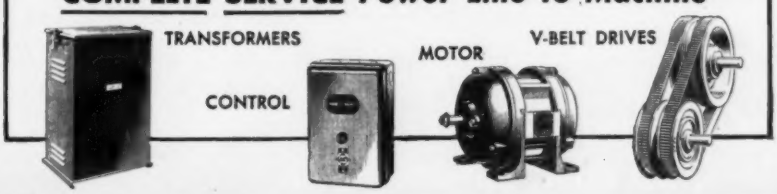
CONSULT ALLIS-CHALMERS ON ALL YOUR DRIVE NEEDS

Many variable speed drive problems can be solved efficiently and economically with Vari-Pitch Standard or Wide Range Sheaves. These are available with Motion Control which permits speed to be adjusted while the machine is operating, and Stationary Control which requires that the machine be stopped for adjustment. Consult your Allis-Chalmers Authorized Dealer or District Office.

ALLIS-CHALMERS, 1054A SO. 70 ST.
MILWAUKEE, WIS.

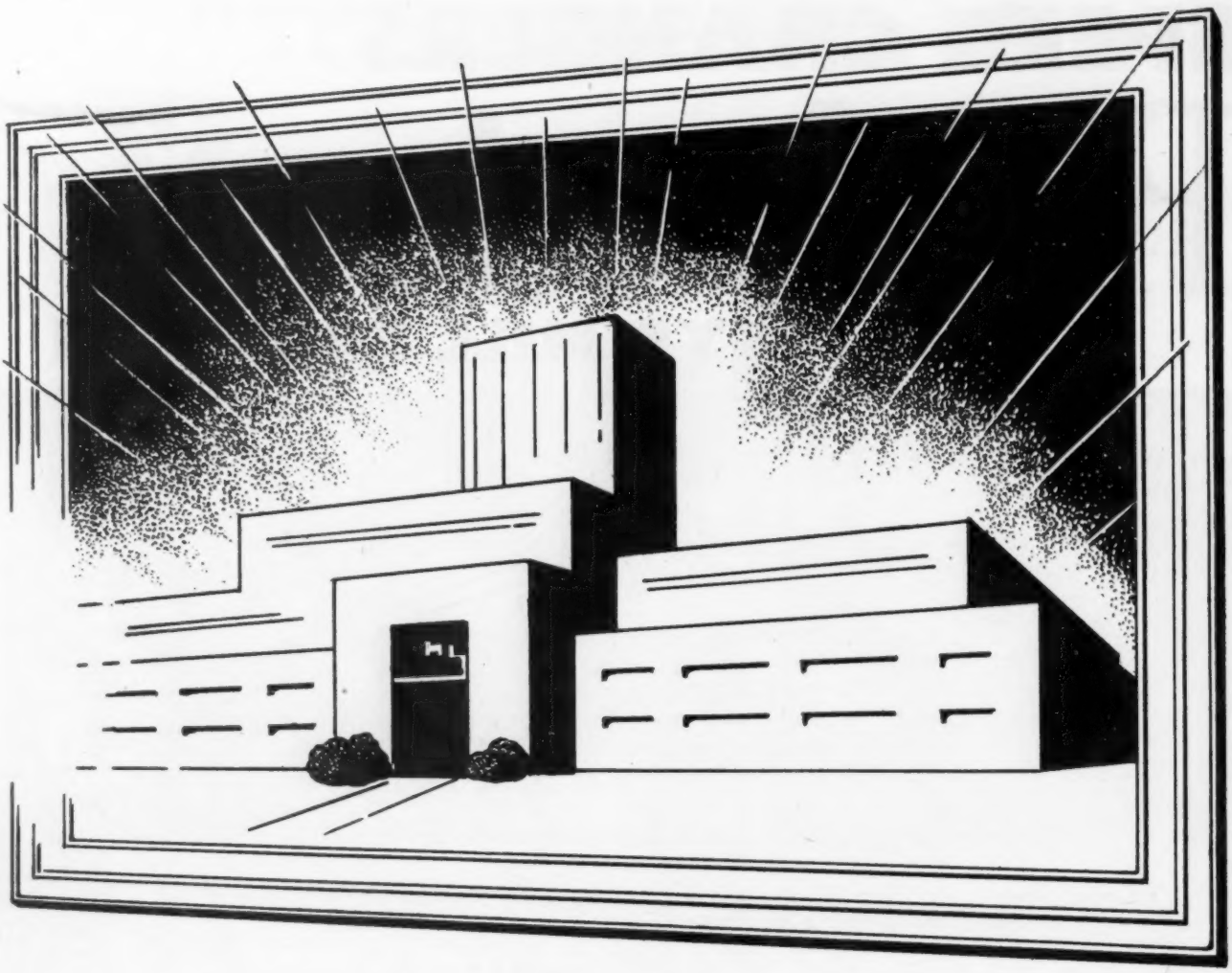
A 2539

COMPLETE SERVICE *Power Line to Machine*



ALLIS-CHALMERS

Originators of the Multiple V-belt Drive for Industry



A New Picture is Emerging

We who draw our livelihood from cotton textile manufacturing want the public to have a correct picture of our industry. We prefer to be well thought of, and we also know that false impressions handicap the industry and are detrimental to our interests.

We are glad that a fair appraisal of the industry is finally being presented to the public; that a true picture of a progressive warmly human and typically American industry is emerging for public attention.

The Industry-Wide Public Relations Program is designed to help correct the old misconceptions hanging over from the past, with up-to-date facts.

The support of all mills is invited for this cooperative effort dedicated to the benefit of the entire industry.

Cotton Textile

Industry - Wide Committee On Public Relations

(This page contributed by Textile Industries)

sulphur colors

in sulphur colors, the first and foremost brand names are

KATIGEN
IMMEDIAL
INDOCARBON

PRODUCTS OF THE GENERAL DYESTUFF CORPORATION

if your problem concerns sulphur colors a consultation with General Dyestuff Corporation may prove very beneficial

GENERAL DYESTUFF CORPORATION
435 HUDSON STREET, NEW YORK 14, N. Y.

TEXTILE BANKING COMPANY

Inc.

Factoring Service

Puts your sales on a cash basis
Strengthens your cash position
Relieves you of credit losses

55 MADISON AVENUE • NEW YORK

Whether you have been using HIGH PRICED SIZE or LOW PRICED SIZE

TRY...

HOUGHTO-SIZE CW

We've been meeting, and beating, all sorts of size compounds recently, in mills where HOUGHTO-SIZE CW has been tested as a size softener.

They have ranged from high-priced, good quality warp softeners, down to cheap compounds loaded up with water to make the price per pound look low. Even the cheap ones cost a lot more these days.

Then along came Houghton-Size CW, and it proved itself immediately. It gave excellent results in slashing and weaving, resulting in increased weave-room efficiency. For detailed proof, write

E. F. HOUGHTON & CO.
303 W. Lehigh Ave., Phila. 33, Pa.
1301-05 W. Morehead St., Charlotte, N. C.

It will give you better sizing... at lower slashing costs

Take advantage of HYATT Experience

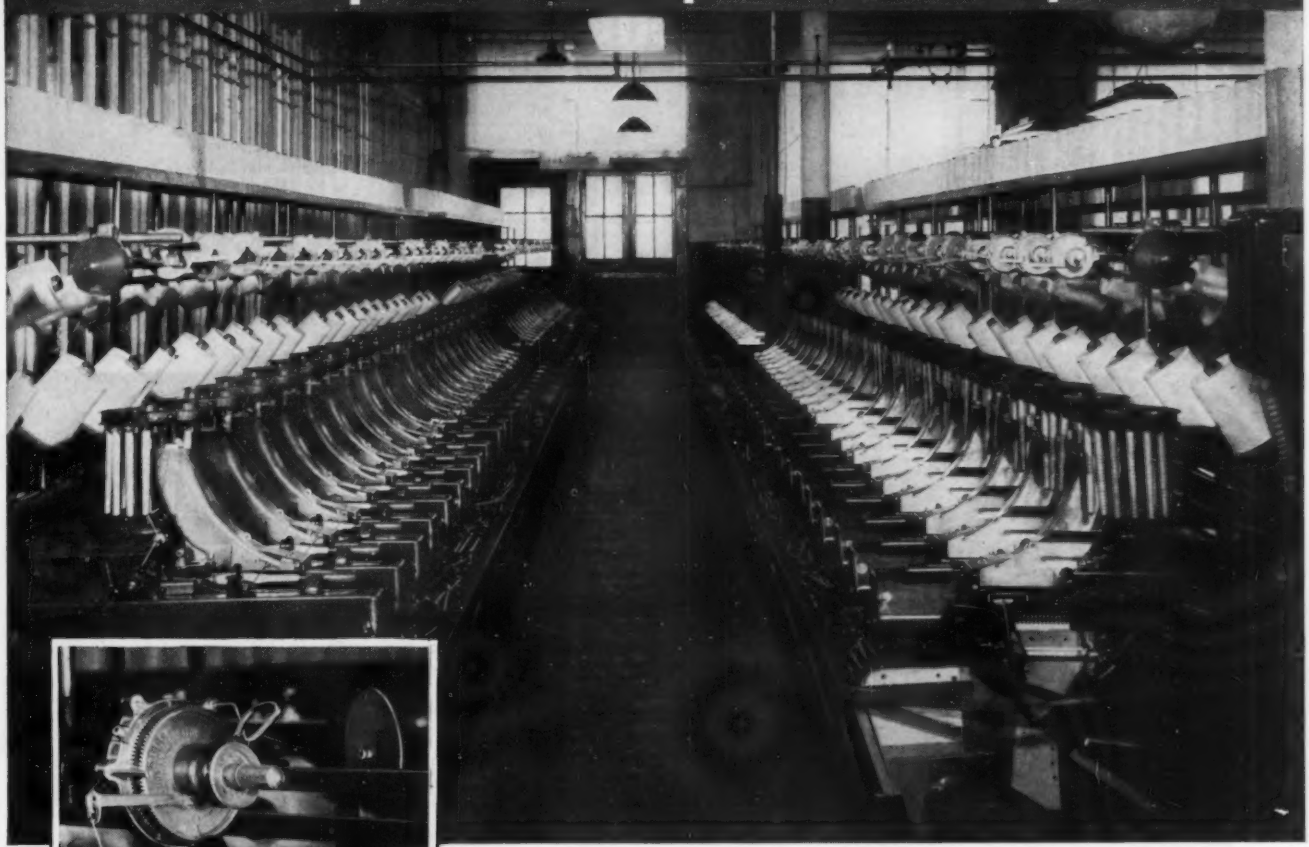
As builders of the first, and today the finest roller bearings, Hyatt, in more than half a century, has accumulated a lot of application experience which should be helpful to you.

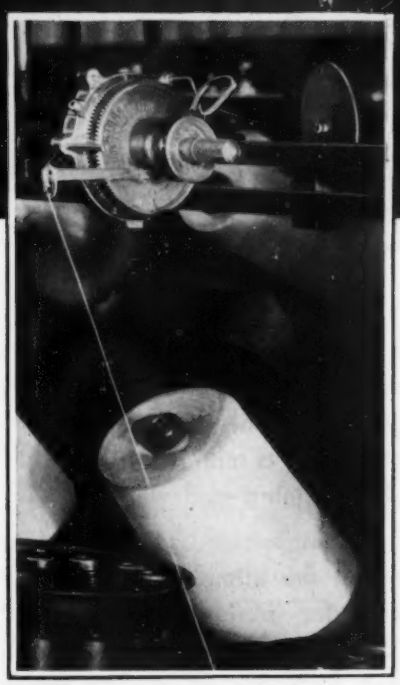
Hyatt engineers are at your service, glad to assist you in solving your bearing problems whether you are designing a new machine or piece of equipment or modernizing an existing design.

Hyatt Roller Bearings are used by thousands of leaders in the automotive—industrial—agricultural—petroleum—construction and transportation fields. Costs you nothing to invite a Hyatt man to confer with you. Hyatt Bearings Division, General Motors Corporation, Harrison, N. J.

HYATT ROLLER BEARINGS

UNIFORM quills from Spindle after Spindle...





...with the *Kidde* Tension Compensator

Here's just *one* of the many large-scale installations in which the *Kidde* Tension Compensator is convincingly proving its value. Hundreds of spindles winding quills—and every quill with uniform tension!

The *Kidde* Tension Compensator is equally useful with a variety of yarns in such operations as warping, dye package winding, filling winding, plying—in fact, *wherever* extremely accurate tensioning is necessary.

When you use the *Kidde* Tension Compensator, you take the variables out of yarn tensioning. Just set this precision device to any desired tension, from 6 to 120 grams. Under suitable conditions tensions as low as 4 grams can be held. The Compensator *automatically* maintains the correct value—regardless of such variables as yarn speed, coefficient of friction, or input tension changes as high as half the tension setting.

Mail the coupon for description bulletin ➧

Kidde

The word "Kidde" and the Kidde seal are trade-marks of Walter Kidde & Company, Inc.

Walter Kidde & Company, Inc.
1191 Main Street, Belleville 9, N. J.

Gentlemen:

Please send me descriptive literature on the Kidde Tension Compensator.

Name .....
Position .....
Company .....
Street Address .....
City ..... Zone # .....
State .....

Walter Kidde & Company, Inc. • 1191 Main Street, Belleville 9, N. J.

Proper Carding Benefits the Whole Mill

with TUFFER CARD CLOTHING

You Get Production Off to the Right Start

The Tufferizing Process— developed and exclusively owned and used by Howard Bros.— cuts and forms wires with an accuracy never before obtained in the making of card clothing. The wires are formed with precision and placed accurately in the famous Tuffer Foundation . . . when drawn on the cylinder they fit snugly — *sides perfectly parallel and every point in place.*

WITH precision-made Tuffer Card Clothing on your cards, you get production off to the right start—raw stock losses are reduced to a minimum and the fine, even web, so necessary for spinning and weaving, is obtained.

Wise management realizes that the money invested in maintaining its card clothing at top efficiency pays off profitably in high quality production and economical operation. The benefits derived from proper carding are felt throughout the entire mill.

Talk over your carding problems with a Howard Bros. representative. You'll find it will prove worth while.

HOWARD BROS. MFG. CO.
WORCESTER 8, MASSACHUSETTS

Southern Plants: Atlanta, Ga. and Gastonia, N. C. **Branches:** Philadelphia, Pa. and Blanco, Texas
Direct Representation in Canada

A-7

TUFFER CARD CLOTHING *IMPROVES PRODUCTION ALL ALONG THE LINE*

For a better way . . .

- √ to improve hand, drape, appearance and launder resistance
- √ to stiffen fabrics
- √ to prevent edge rolling, raveling and shifting of warp and fill
- √ to bind back-filling compositions

Try DU PONT "ELVACET"

Polyvinyl Acetate Emulsion

THIS versatile, low-cost resin may solve many finishing problems on a wide variety of fabrics. With very little "Elvacet" you can get practically any kind of hand or drape. It can be applied with conventional equipment to non-woven, woven and knitted fabrics made from filament and staple yarns of all types and constructions. Typical classes of goods which can be treated with "Elvacet" include: woven and knitted piece goods, toweling, pile fabrics, drapery fabrics, tricot knits for inner and outer wear, hosiery, etc.

CHECK THESE ADVANTAGES OF "ELVACET"

Completely dispersed in water.

Highly concentrated with no modifiers. Easily diluted with water to requirements.

Highly compatible with starches, dextrins, gums, waxes, and synthetic resins commonly used in semi-permanent and permanent finishes; also with ester-type plasticizers which are sometimes needed with "Elvacet" to get effects desired.

Highly stable—very little settling over fairly long periods or when highly diluted for normal use.

We'll be pleased to tell you more about "Elvacet," how it can be used in economical finish formulas. Just clip the coupon and mail today!

Clip this coupon

E. I. DU PONT DE NEMOURS & CO. (INC.)
ELECTROCHEMICALS DEPARTMENT
WILMINGTON 98, DELAWARE

DISTRICT SALES OFFICES: Baltimore, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Detroit, El Monte (Calif.), New York, Philadelphia, Pittsburgh, San Francisco.

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*
Tune in Du Pont "Cavalcade of America" Monday nights—NBC Coast to Coast

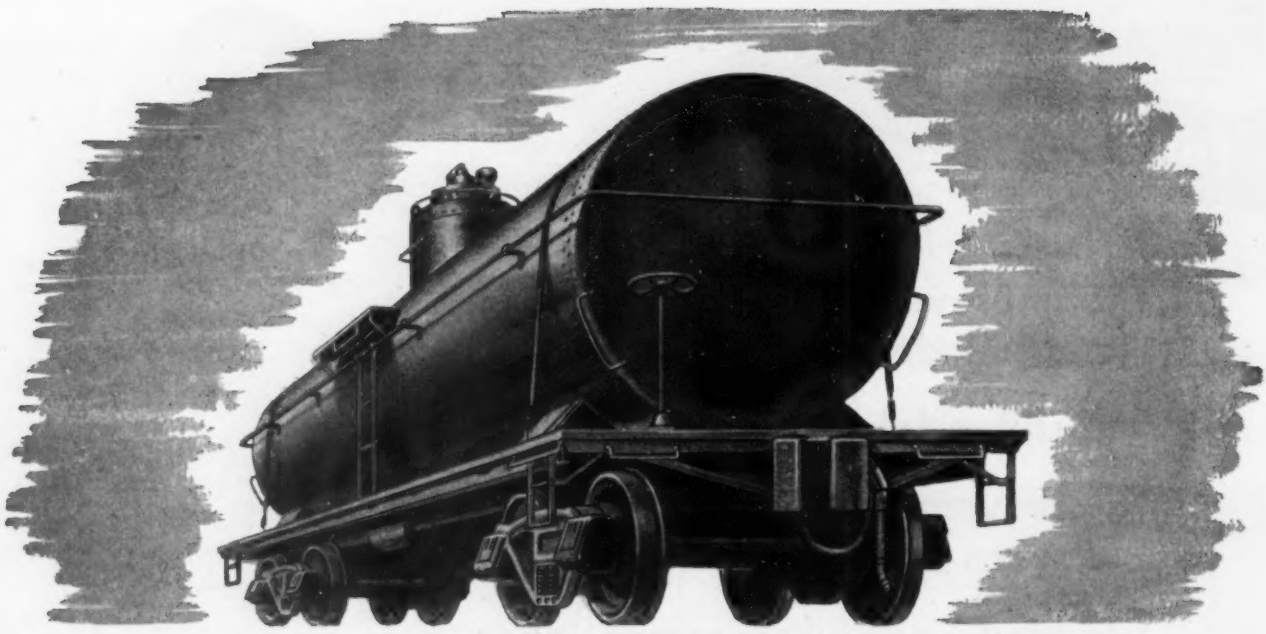
E. I. DU PONT DE NEMOURS & CO. (INC.)
ELECTROCHEMICALS DEPARTMENT,
Vinyl Products Division,
Wilmington 98, Delaware

Gentlemen: Please send me your bulletin on "Elvacet" Polyvinyl Acetate Emulsion.

Name_____

Firm_____

Address_____



EMERY PRODUCTS FOR TEXTILES

TWITCHELL OIL

FOR WOOL

Twitchell 7410 Wool Oil and Twitchell 7420 Worsted Oil, for lubrication in carding, combing, spinning and weaving operations, are finished oils ready for use, self-emulsifying, easily scourable. Twitchell 7430 most readily scourable oil available.

FOR COTTON

Non-staining Twitchell Oil 7250 for all finishing, produces fastest rewet, softest hand. Oil 7240 for fast wetting back, medium hand.

Twitchell Oil 7231 (formerly 3X—the long established standard rewetting agent) has the least effect on hand. All three recommended for finishing regular or Santorized fabrics, for slashing.

FOR RAYONS

Twitchell Oils 7681, 7685, 7687 adjusted to viscosity specifications, to lubricate knitting and weaving yarns and Twitchell 7620, a coning oil for nylon yarn, are self-emulsifying, non-staining, easy scouring oils. For crepe yarn soaking, Twitchell 7810 is compatible with starches, gums and other sizing agents.

FATTY PRODUCTS

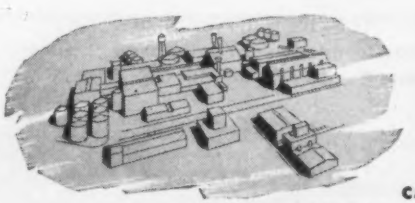
FATTY ESTERS

Emery 2210 Glyceryl Monostearate
Emery 2510 Propylene Glycol Monostearate
Emery 2410 Diethylene Glycol Monostearate
Emery 2221 Glyceryl Mono-oleate
Emery 2301 Methyl Oleate
Emery 2302 Propyl Oleate
Emery 2230 Glyceryl Trioleate
Hyfac 2130 Hydrogenated Fish Oil Glyceride

FATTY ACIDS

Emersol 120 Standard Stearic Acid
Emersols 210 & 220 Elaine (Oleic Acid)
Emersols 211 & 221 Low Titre Elaines
Emery 621 & 622 Coconut Fatty Acids
Hyfacs 410 & 420 Hydrogenated Tallow F. A.
Hyfacs 430 & 431 Hydrogenated Fish Oil F. A.

Descriptive literature—full specifications on request.



EMERY
INDUSTRIES, INC.
CAREW TOWER • CINCINNATI 2, OHIO

TEXTILE PRODUCTS

3002 Woolworth Building
NEW YORK 7, N. Y.

187 Perry Street
LOWELL, MASSACHUSETTS

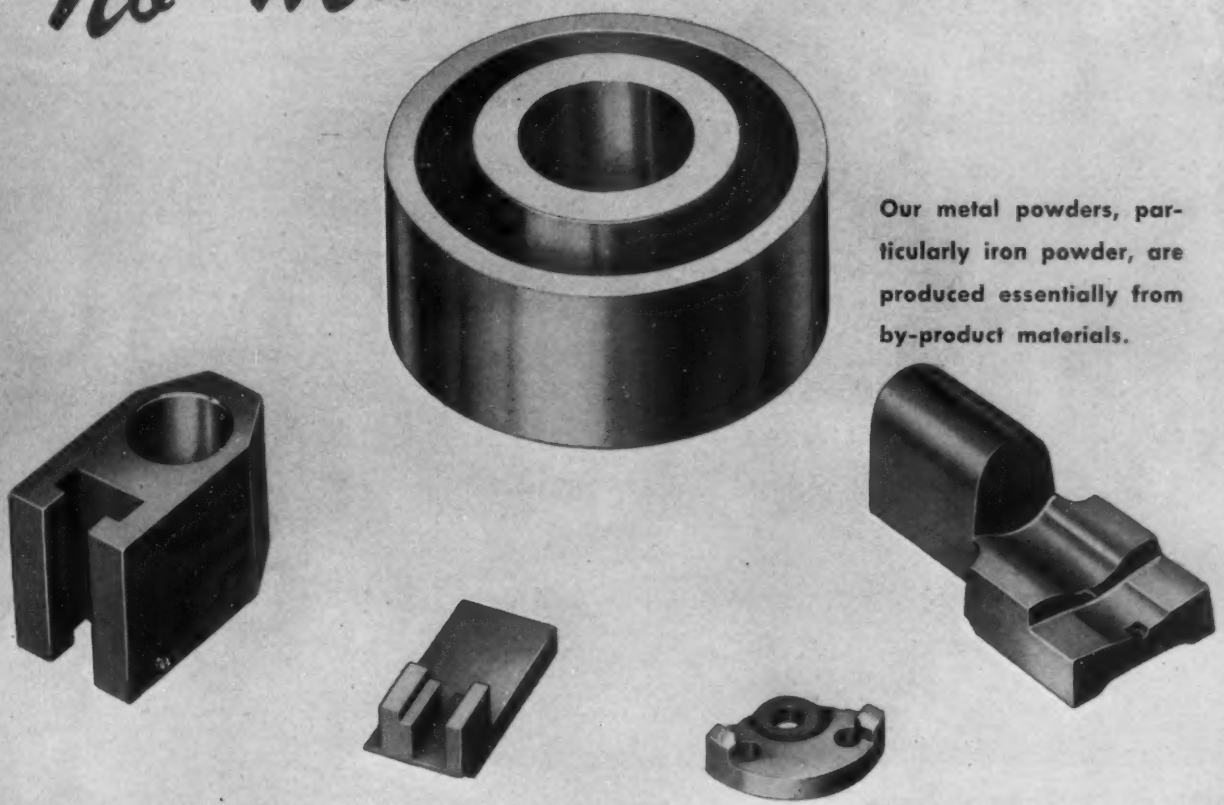
401 N. Broad Street
PHILADELPHIA 8, PA.

STEARIC ACID • OLEIC ACID • ANIMAL AND VEGETABLE FATTY ACIDS • TWITCHELL PRODUCTS • PLASTICIZERS

✓ Director of Purchases ✓ Chief Engineer ✓ Production Executive

AMPLEX-OILITE has experienced

No Material Shortage!



Our metal powders, particularly iron powder, are produced essentially from by-product materials.

OILITE FINISHED MACHINE PARTS

With the shortage of castings, stampings and forgings, manufacturers look to Amplex for OILITE finished machine parts, from metal powder, replacing those materials. Very frequently Amplex furnishes OILITE finished machine parts, through powder metallurgy, at a saving. Other advantages of OILITE parts are short tool up time, quick delivery, improved appearance, and the incorporation of details of design not machinable by production machine tools.

Send your blueprints to Amplex Field Engineer or the Home Office. Address Dept. M.

AMPLEX MANUFACTURING CO. DETROIT 31, MICHIGAN

Division of Chrysler Corporation

FIELD ENGINEERS AND OILITE BEARING DEPOTS IN PRINCIPAL CITIES

Unit Responsibility

KEY TO MORE

Here's proof of the value of unit responsibility! This modern weave room produces the highest quality product . . . most efficiently. Westinghouse planned engineering provides individual drives and controls, uniform illumination, and Precipitron, the electronic air cleaner that provides clean, pure air.

"FROM OPENING TO FINISHING... ELECTRICAL AND POWER EQUIPMENT DESIGNED FOR EACH JOB"

The economical application of Westinghouse apparatus and electric power to textile mills has given the industry a new conception of speed, economy . . . *and* an improved product.

Whether it's a single motor drive, a complete power system, an individual lamp, or an entire lighting program . . . you need only contact one organization for your complete electrical requirements. From the start, Westinghouse has maintained a complete, separate Textile Department, staffed by competent engineers. These men are on the job full time producing better power equipment, and more efficient methods of applying, distributing, controlling and utilizing electric power for textile mills.

All this knowledge is yours for the asking . . . at Westinghouse. You'll get a speedy, accurate and simple solution to your textile problem.

Call your nearest Westinghouse office or write Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pa.

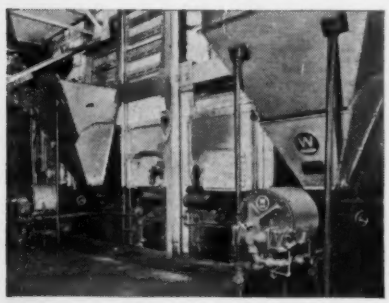
PRODUCTIVE POWER

"WESTINGHOUSE-EQUIPPED THROUGHOUT" MEANS SIMPLIFIED ORDERING, QUICKER INSTALLATION, MORE EFFICIENT OPERATION

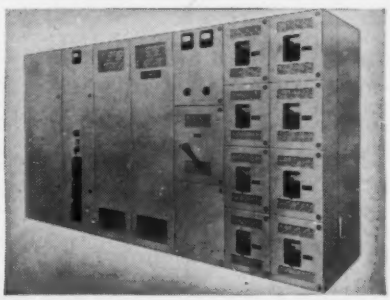
Putting power to work *productively* can be a major problem—or a simple one. When items must be selected, ordered and received from many sources, it means many chances for costly errors and delays . . . divided responsibility—or none at all—for performance of installed equipment.

Westinghouse offers the way to simplify the job. From equipment for generation of electrical or steam power, to the most specialized types of drives and control for its utilization, Westinghouse provides a single source of supply . . . one broad pair of shoulders competent to take responsibility for performance of all parts of the job.

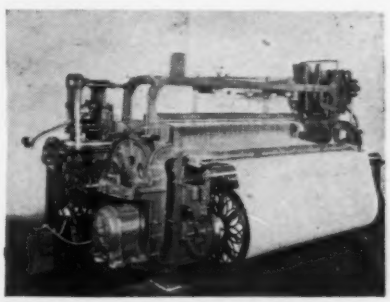
Here are a few of the places where Westinghouse unit responsibility prevents headaches . . . saves money . . . assures *more productive* power:



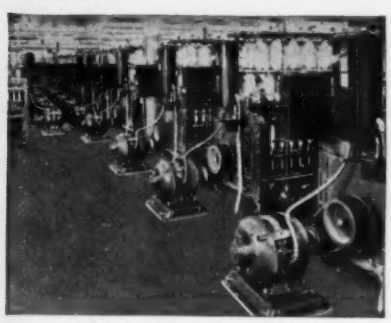
STOKERS—Ability to burn cheaper grades of fuel, and to eliminate smoke nuisance are two outstanding advantages of Westinghouse "Link-Grate" Stokers. These stokers fire the boilers supplying power and process steam in a New York textile mill.



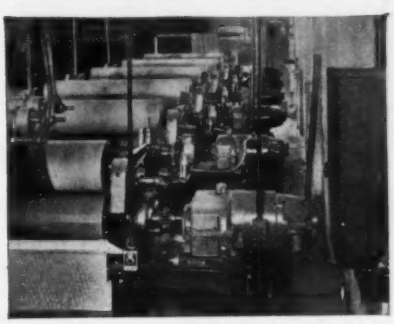
SWITCHGEAR—Westinghouse supplies a wide range of "Unitized" metal-clad switchgear that permits quick, economical installation. Unit shown contains a 750-kva air-cooled transformer, high-voltage metal-clad air breaker, and draw-out, low-voltage air circuit breakers.



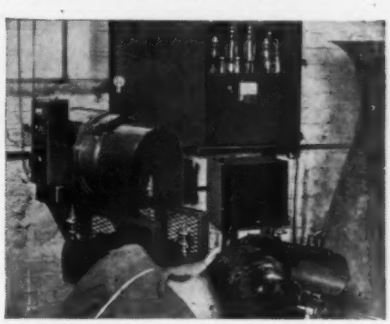
LOOM MOTORS—Westinghouse Loom Motors give maximum production with a minimum of power. Shown is a "weave room tested", specially-designed Westinghouse 1-1/2 hp loom motor driving a modern woolen and worsted loom.



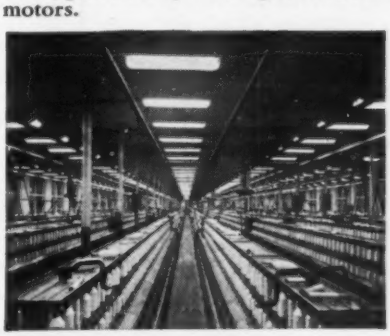
LINT-FREE MOTORS—Installation of spinning frames, driven individually by Westinghouse Lint-Free Motors and controls. They're specially designed to provide the "cleanest running textile motor available".



GEARMOTORS—Westinghouse Gearmotors greatly facilitate the application of power for machines with slow-speed input shafts. Illustrated is a range drive, powered by Westinghouse Gearmotors.



MOT-O-TROL—This flexible electronic control solves any control problem requiring wide-range stepless speeds and close automatic regulation at all speeds and varying loads.



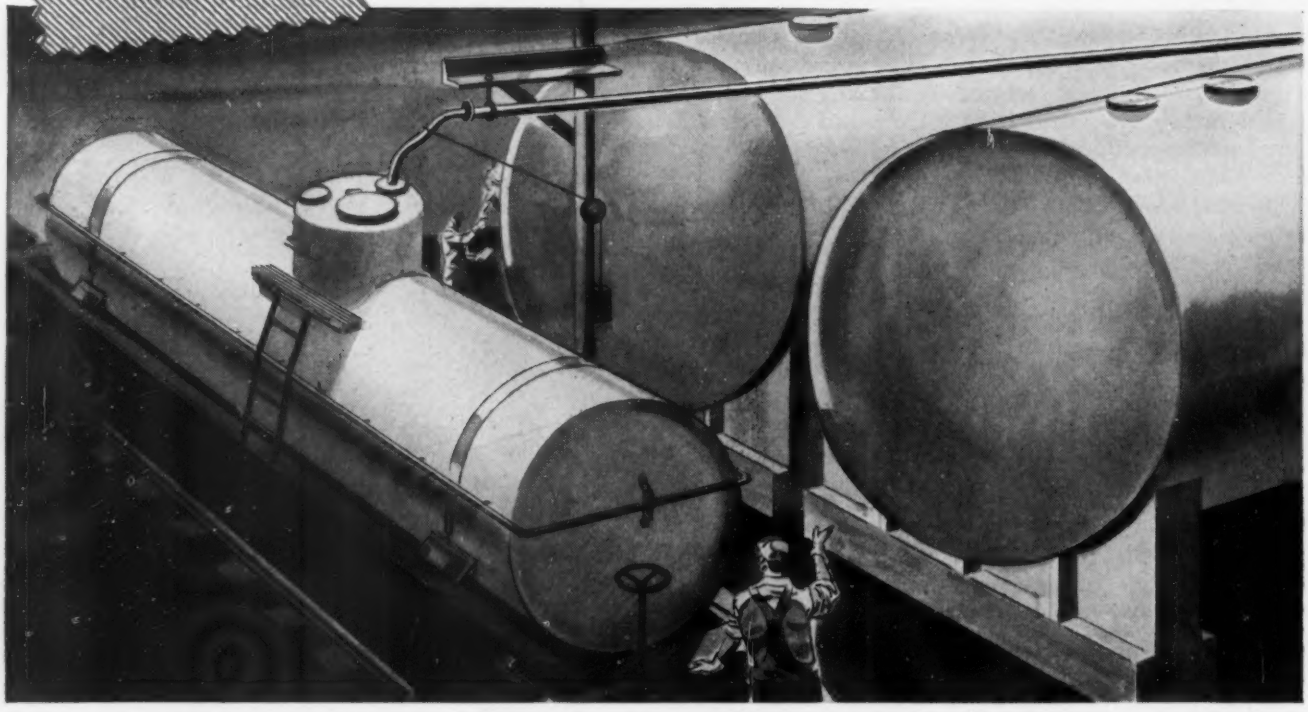
LIGHTING—Modern fluorescent lighting provides maximum "see-ability" in this textile mill. Westinghouse "planned lighting" is added proof of the value of single-source responsibility.

Westinghouse

PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

MORE PRODUCTIVE POWER FOR INDUSTRY

CONTINUOUS BLEACH . . . **. it's only as good as the tanks it's stored in . . .**



KEEP YOUR BLEACH AT FULL STRENGTH . . .

insist on tanks of ALCOA ALUMINUM

The men who make hydrogen peroxide know it can be as skittish as a colt. That's why they ship it in tank cars of Alcoa Aluminum. Aluminum doesn't promote the decomposition of peroxide. The oxygen stays where it belongs—in the bleach, which remains at full strength.

That means every dollar's worth of peroxide does its full day's work. Besides, aluminum's corrosion resistance means no streaking of yarns as the result of red rust from tank metal. Tanks of Alcoa Aluminum are the lowest cost, corrosion-resistant tanks you can buy.

Alcoa has the facilities and experience to build peroxide tanks to your specifications—and deliver Alcoa-made tanks promptly. Or ask your tank builder to take advantage of Alcoa Aluminum and Alcoa engineering help. Call your nearby Alcoa sales office, or write ALUMINUM COMPANY OF AMERICA, 1473 Gulf Building, Pittsburgh 19, Pennsylvania.

Alcoa Aluminum for other mill operations, too!

Pipe and fittings of Alcoa Aluminum help keep peroxide at full strength, help prevent discoloration.

Slasher hoods of Alcoa Aluminum stay bright and clean, resist corrosion, don't discolor materials.

Separators for spinning frames and twisters help promote smoother operation because of decreased load on ring rails.

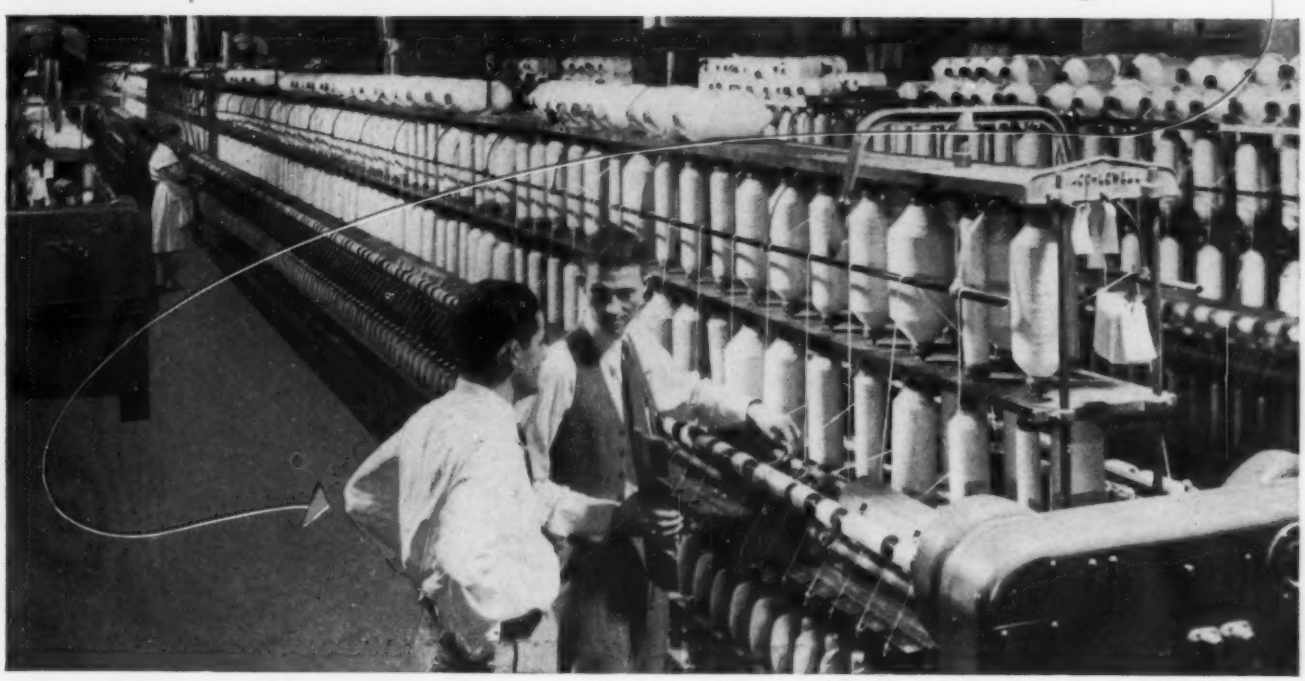
Warp beams and loom beams, new or replacement, are dimensionally stable, don't warp or splinter.

Here, and dozens of other places, Alcoa Aluminum can speed production, reduce waste, help you save money because it's strong, light in weight, corrosion-resistant.

ALCOA FIRST IN **ALUMINUM**

ALCOA ALUMINUM 1888 1948 60 YEARS OF SERVICE

let a *Gulf Lubrication Engineer* work with you, for you—



- **to reduce wear and downtime,**
- **cut maintenance and power costs,**
- **eliminate lubricant gumming**
- **reduce ends down**

A Gulf Lubrication Engineer (left) discusses spindle and draft roll lubrication with the Superintendent of spinning in a prominent Southern mill.

SCORES OF LEADING MILLS find the wide experience and broad practical knowledge of Gulf Lubrication Engineers invaluable—a source of real down-to-earth solutions for their maintenance and lubrication problems.

One of these trained specialists can help you eliminate guesswork in lubrication—assist you to get the full advantage of lubricants as engineering materials. For he is thoroughly familiar with all factors which affect lubrication efficiency—and he makes available a complete line of quality oils and greases designed for service under widely varying operating conditions, no matter how severe.

When he makes a recommendation of the right Gulf lubricant and the most suitable method of application, you can be sure of satisfactory results.

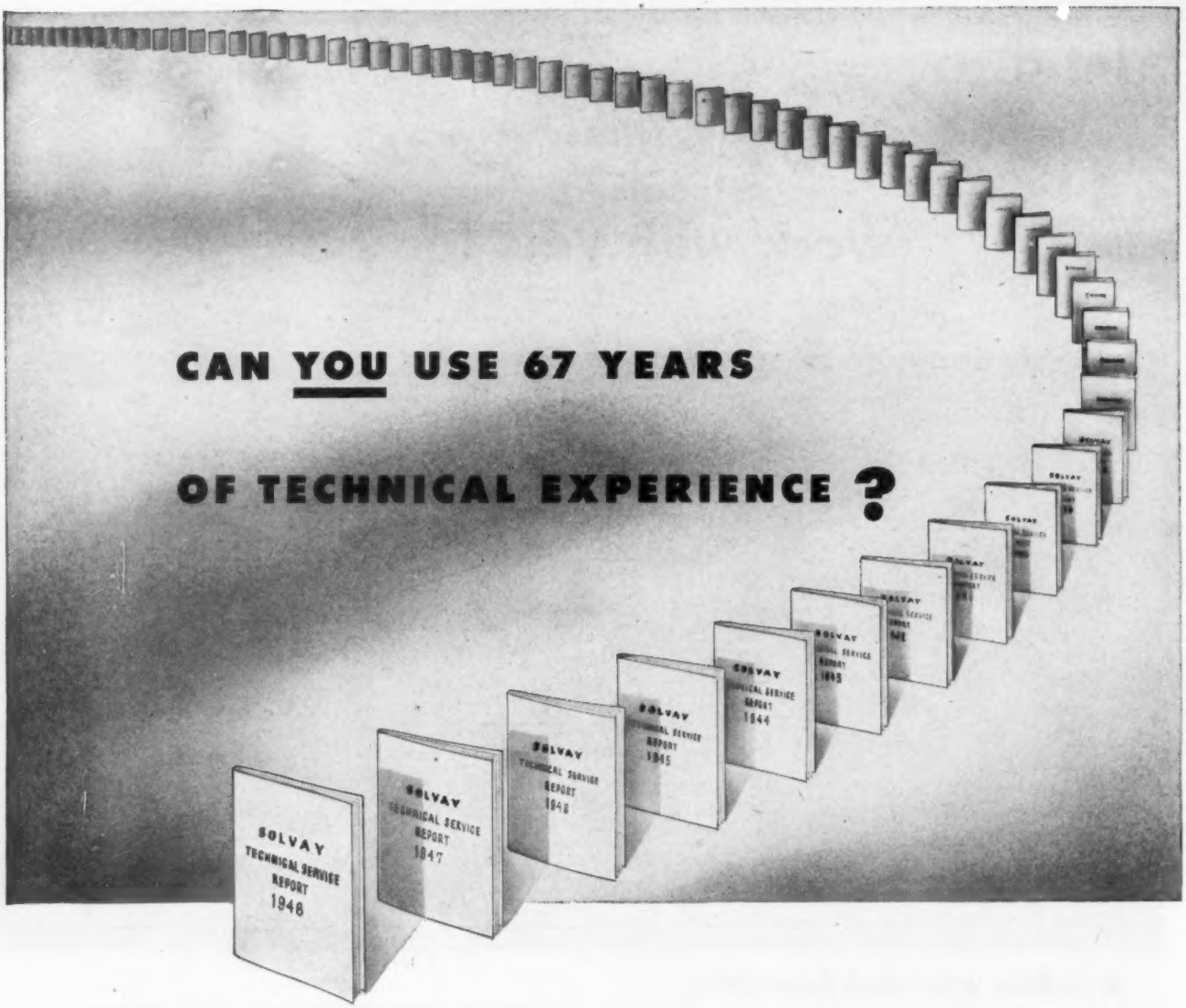
If you are not already doing so, get the benefits of this helpful engineering service. Call in a Gulf Lubrication Engineer today and ask him to give you specific cases of mills, similar to yours, who have reduced power and maintenance costs through improved lubrication. Write, wire, or phone your nearest Gulf office.

Gulf Oil Corporation · Gulf Refining Company

Division Sales Offices:

Boston · New York · Philadelphia · Pittsburgh · Atlanta
New Orleans · Houston · Louisville · Toledo

GULF INDUSTRIAL LUBRICATION


CAN YOU USE 67 YEARS
OF TECHNICAL EXPERIENCE ?
SOLVAY TECHNICAL SERVICE REPORT 1946
SOLVAY TECHNICAL SERVICE REPORT 1947
SOLVAY TECHNICAL SERVICE REPORT 1948
SOLVAY TECHNICAL SERVICE REPORT 1945
SOLVAY TECHNICAL SERVICE REPORT 1944

Solvay—the pioneer alkali manufacturer in America—offers your technical department a *special* type of technical service . . . to help solve your production problems involving the use of alkalies.

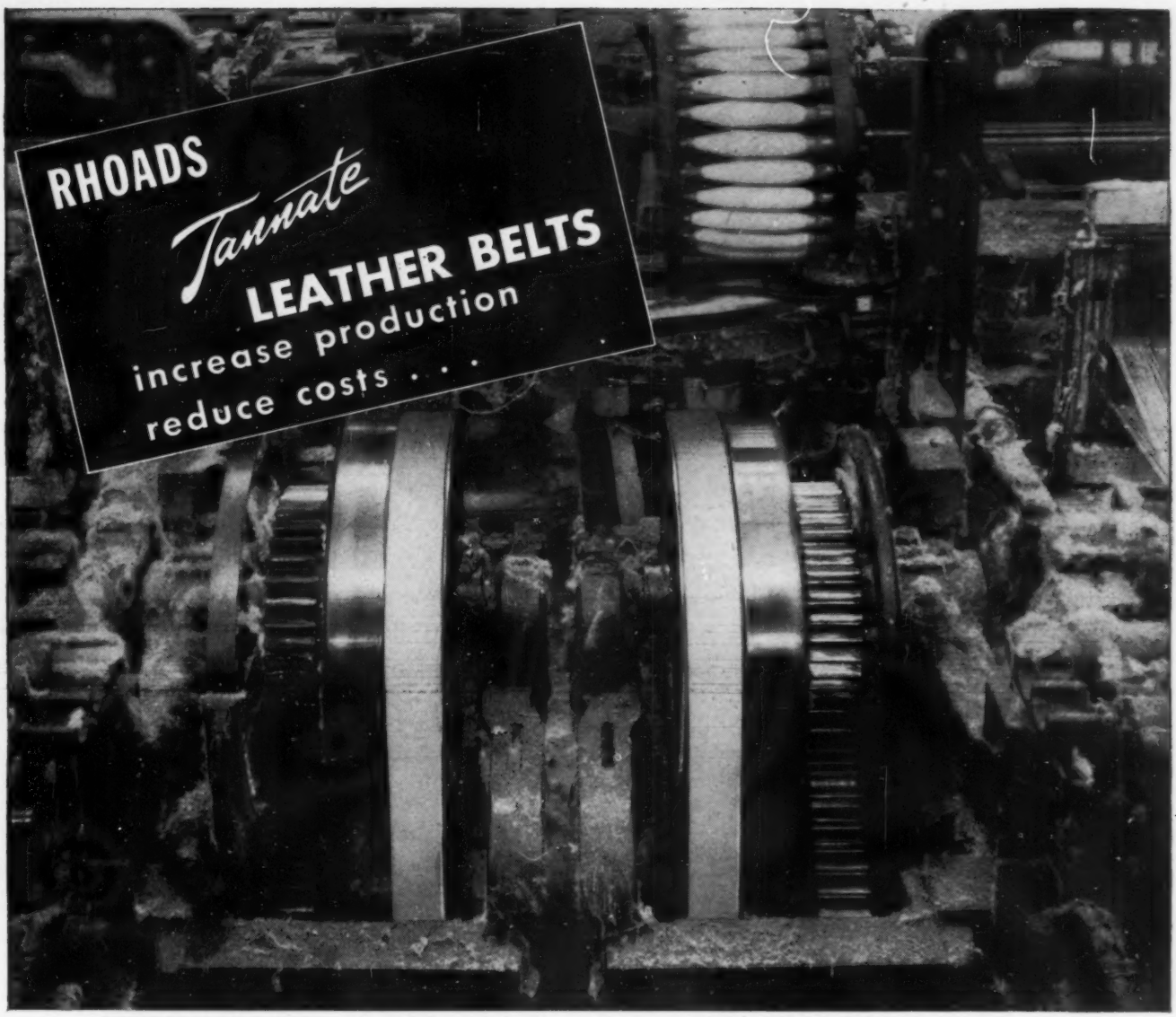
Solvay Technical Service—with a background of 67 years of accumulated knowledge and experience—is set up on an "industry-wise" basis. It consists of men who are field specialists in individual industries. For this reason, manufacturing and processing executives have come to depend on SOLVAY TECHNICAL SERVICE. They have found that this staff of experts thoroughly knows the individual industry and its complex problems.

Put this specialized talent to work for you the next time you have a production problem involving alkalies and associated chemicals. Let a SOLVAY TECHNICAL SERVICE field specialist *in your industry* help you find the right answer. There is no cost or obligation . . . and the strictest confidence is assured.

Industry-Wise
SOLVAY Technical Service
Individual Industry Specialists to Serve You

SOLVAY SALES DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

BRANCH SALES OFFICES:
Boston • Charlotte • Chicago • Cincinnati • Cleveland
Detroit • Houston • New Orleans • New York
Philadelphia • Pittsburgh • St. Louis • Syracuse



Driven from a line shaft under the floor, these looms have been TANNATE belted for about twenty-one years of trouble-free, low cost operation.

Whether for group driven installations or individual units, TANNATE leather belting can give you greater reliability and economy and low maintenance.

TANNATE offers maximum grip with minimum tension. This means more power transmitted with reduced wear on bearings and belt.

Flexible — it will operate well over small pulleys at high speed.

Resilient — TANNATE leather belting cushions shock loads.

Resistant to moisture and mineral oils — it will transmit full load even when damp.

Performance records are constantly proving that TANNATE leather belting assures greater uniform yardage — less spoilage — less maintenance — and higher profits.

For further details on how TANNATE can benefit you, too, write us.

Be sure to visit Booth 269-271 at the Power Show—Nov. 29 to Dec. 4, 1948— at New York City

STRAPS FOR LOOMS AND OTHER MECHANICAL LEATHER PRODUCTS

PRODUCERS OF FINE LEATHER FOR 246 YEARS

J. E. RHOADS & SONS

35 NORTH SIXTH ST., PHILA. 6, PA.

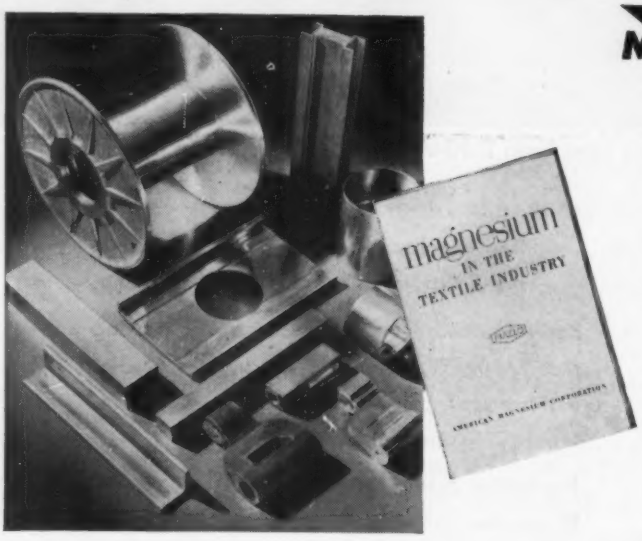
NEW YORK • CHICAGO • ATLANTA

STOP

HARD TO STOP—a husky 200-pound fullback driving hard through the line. It takes power to halt weight in motion.

START

QUICK GET AWAY—a shifty 150-pound quarterback on a wide end run. Lighter weight means a faster start.



MORAL: In textile machinery, as on the gridiron, inertia must be overcome everytime something starts or stops. The heavier reciprocating parts are, the more power it takes to keep them operating. Why not lighten up with American Magnesium? It's 35% lighter than aluminum, 75% lighter than steel. Magnesium parts save power, cut vibration, reduce wear on machinery. Ask your machinery builder to specify this light, strong metal wherever possible for better performance and less down time.

ALUMINUM COMPANY OF AMERICA, sales agent for American Magnesium products, 1704 Gulf Building, Pittsburgh 19, Pa. Sales offices in principal cities.

FREE! Send for your copy of the valuable booklet, "Magnesium in the Textile Industry". It is full of information on magnesium's properties and how they can be utilized to improve textile machinery.

MAGNESIUM MAZLO PRODUCTS

AMERICAN MAGNESIUM CORPORATION

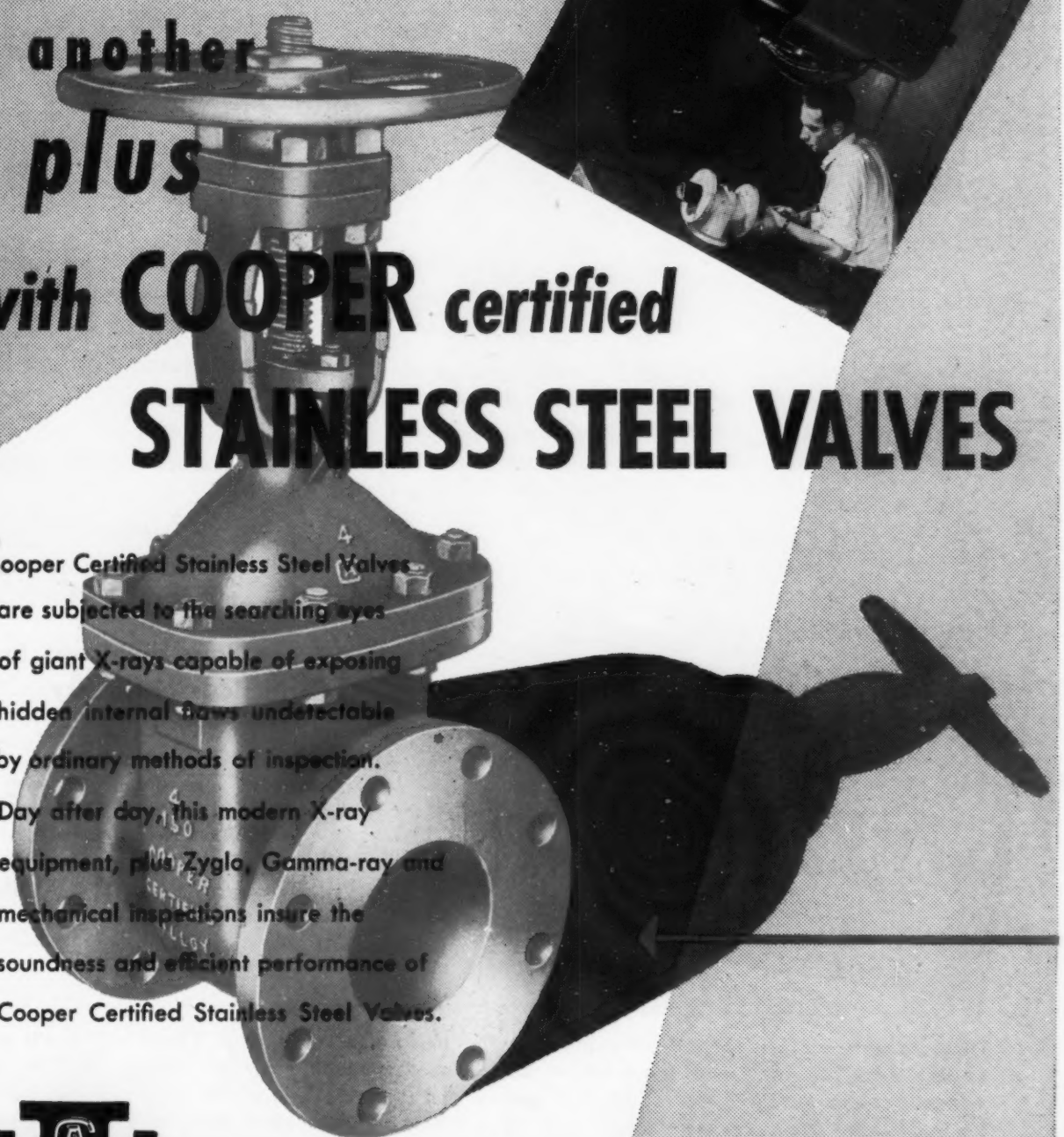
SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

X-RAY INSPECTION

another *plus*

with COOPER *certified*

STAINLESS STEEL VALVES



Cooper Certified Stainless Steel Valves are subjected to the searching eyes of giant X-rays capable of exposing hidden internal flaws undetectable by ordinary methods of inspection. Day after day, this modern X-ray equipment, plus Zyglo, Gamma-ray and mechanical inspections insure the soundness and efficient performance of Cooper Certified Stainless Steel Valves.

Write for new Valve Catalog #51

Est. 1922

SOLD THRU THE LEADING STAINLESS STEEL DISTRIBUTORS

Specialists in Corrosion Resisting Stainless Steel

THE COOPER ALLOY FOUNDRY CO.

HILLSIDE, NEW JERSEY

Here's the story on the PROVED loom motor

HOW IT.....

- Delivers more power to the loom
- Consumes fewer power dollars
- Lowers maintenance costs
- Has a longer, efficient life
- Operates coolly . . . and
- Pays dividends in better loom efficiency

YOU CAN BE SURE IF IT'S Westinghouse

Here are pertinent facts about the Westinghouse Loom Motor . . . the *proved* loom motor, developed co-operatively by Westinghouse and leading loom manufacturers. Many years of successful operation in thousands of textile mills prove its ability to give you the kind of performance you want. That's why you'll want the complete story in bulletin B-3778, just off the press. To get your copy call your nearest Westinghouse office or write to Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania. J-21490

Westinghouse
PLANTS IN 25 CITIES... OFFICES EVERYWHERE

Loom Motors

If you knew all the variables

A storm—a shift in the wind—can sometimes raise havoc with craft normally considered safely moored. It's the variables that upset even the best calculations.

Likewise, in de-sizing operations, it's the variables that cause the difficulty. Variables in water, variables in sizing formulas, create the new and unexpected problems you have to meet in almost every lot.

Bleachers and dyers faced with such problems know the value of the all-purpose de-sizing agent—Diastafor brand—Type L. By many of them, it's considered almost fool-proof.

Diastafor — Type L has been developed especially to meet widely varying conditions —to help you with problem lots where a flexible, adaptable de-sizing agent is required.

Diastafor will work well in a wide range of temperatures and pH. You can depend on it to give you a good "hand"—even on your hardest lots—whether you are working with cottons, rayons or mixed goods. It can be used satisfactorily in the new continuous process.

Diastafor customers praise it for its economy as well as its ease of use and efficiency—qualities that have made Diastafor the leader for 40 years.

If you have not used Diastafor, why not let one of our representatives tell you how it can be of service to you? Write Standard Brands Incorporated, *Diastafor Department*, 595 Madison Avenue, New York 22, New York.

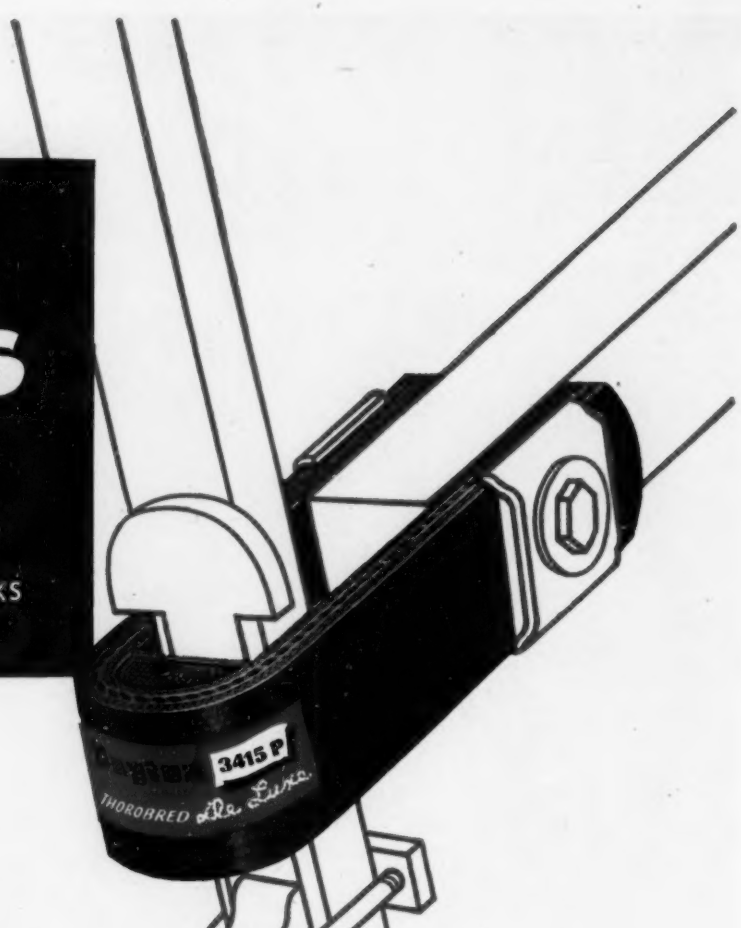
DIASTAFOR

A TRADE MARK OF STANDARD BRANDS INCORPORATED

DAYTON LUG STRAPS

with Built-in Cushion

PROTECT CAM POINTS, PICKER STICKS



Specify

Dayton 3415 P
THOROBRED De Luxe

LUG STRAPS
for these additional advantages

- Extra strength—beyond every requirement.
- Long, trouble-free life.
- Easy to apply.
- No parts to work loose.
- No permanent stretch.
- Less abrasive action on picker stick and hold-up.
- No rivets.
- Moulded-in plug—all one piece.
- Not affected by humidity.

Dayton Thorobred DeLuxe Lug Straps are built with the exact, right amount of cushion, to protect vital loom parts from the jarring thrusts of quick starts and stops. The center of each lug is reinforced with a *special longitudinal cord* which provides increased strength along the line of force, insuring longest possible life. Manufactured in one piece, with a new moulded-in plug, Dayton Thorobred Lug Straps have no rivets, no parts to work loose. Not affected by humidity, they resist the effects of oils and greases. *They outlast three ordinary lug straps* and provide perfect service during their long, trouble-free life. Prove to yourself that Daytons are your best investment for the most efficient operation of your looms. Order a few today, write the Dayton Rubber Company, *Textile Division, Woodside Building, Greenville, S. C.*

Dayton Rubber

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

Expert to Expert

"In your review No. 2, year 1948, you published a detailed treatise by L. D. Sayers concerning attendance and lubrication of textile machines. I am highly interested in the said compositions, as I myself am an expert in the line of cotton-spinning and weaving, and please have the kindness to remit me a copy."

NAME ILLEGIBLE
(Foreign)

(Les Sayers' article, reprints of which are available, went forward to the letterhead address; title "Centralized Preventive Maintenance at Mt. Vernon-Woodberry Mills," but we'd still like to meet the fellow who modestly admits that he's an expert.)

◆

Requests for Ramie Article

We are unable to supply clip sheets of the well-received article, "Ramie Today," which appeared in our August issue. We've exhausted our supply. Reprints may be secured by writing to the State Engineering Experiment Station, Georgia Institute of Technology, Atlanta.

◆

Forecasts

Occasionally we are asked to forecast textile conditions. Such requests may come by telegram, letter, or by long-distance telephone, and the parties desiring the information always want it in a hurry.

Our editors stand to get caught short on such forecasts, but thus far have been lucky, though at times reluctant to impart this bit of crystal-gazing to the general public.

However, since one of the most successful stock market prognosticators has been getting his dope from the comic strip "Bringing Up Father," the editorial department says forecasts will be imparted to all comers, based on "Lil Abner" and "Kerry Drake."

◆

We're Now Moved

We are finally finished with the job of moving from our old quarters in the Grant Building, and now occupy our new offices with more of a southern (suh) address, 806 Peachtree, N. E. Come to see us!

Spun Rayon Yarn Reprints

Many requests come to us for reprints of the articles by Leslie Cobb on "Processing Procedures for Spun Rayon Yarns." These articles have been placed in booklet form and are available gratis from Tennessee Eastman Corporation, Kingsport, Tennessee.

◆

September's Card Clothing Story

"If possible, could you send us six reprints of 'Respect Your Card Clothing.'"

C. E. BAULDRY
Clark Thread Company
Thomasville, Georgia

◆

Revolutionary

"With reference to your inquiry about our new _____, which has been developed, I might say that it will _____ better and _____ eight times. The _____ will be made available to the trade on _____, but until that time, even though you know about it, we ask that you not disclose the fact that it will _____."

NAME WITHHELD

(We assure you that it has, does, and will, and we won't.)

◆

More July Compliments

"Your July issue commemorating fifty years of service to the industry, was, in the estimation of us all, a masterful and impressive assemblage of articles. From all indications, it looks like articles associated with wool are becoming more numerous and increasingly important in your journal."

LOUIS A. FIORI
New Orleans, La.

"Congratulations on the excellent looking fiftieth anniversary issue . . . it is a very creditable job and I am sure by now you have received many compliments."

JOHN W. REINHARDT
Advertising Manager
Proctor & Schwartz, Inc.
Philadelphia, Pa.

"On page 177 of your July issue you carried a very interesting story entitled 'Progress in Materials Handling.' Because

SHORTS and REMNANTS

by M. L. D.

I know our readers, who are bedding manufacturers, will be very interested in this article, I would like to request your permission to reprint it in our magazine."

ROBERT B. LOGAN
Editor
"Bedding"
Chicago, Ill.

◆

Indicative

"We are interested in finding out about materials handling methods in woolen mills and would appreciate it if you would refer us to articles which appeared in TEXTILE INDUSTRIES."

KINSEY & COMPANY
Management Consultants
New York City

(The editors have recognized the increasing interest in materials handling problems by publishing many articles on the various methods used to solve different types of problems. While the industry was slow to adopt modern practices, it seems to be making up for lost time.)

◆

Back Copies Request

"Please send us two copies of 'Processing Procedures for Spun Rayon Yarns' by Leslie L. Cobb, reprinted from November and December 1945 and January and February 1946 issues."

S. C. VENEY
Assistant Manager
Duplan Corp.
Hazleton, Pa.

"We are in need of a complete copy of your publication for the month of September 1937."

INTERWOVEN STOCKING COMPANY
New Brunswick, N. J.

◆

Rack Up Another For Dan River

"Will you please send us two copies of the reprints of the very interesting articles about maintenance by Frank L. Byrd."

MAX J. WEYL
Textile Industry Research, Inc.
New York City

(This is the article "Preventative Maintenance at Dan River Mills" which has had continued interest long after its appearance in T.I.)

◆

Wants to Complete Series

"We have been very much interested in the series of articles on 'Winding Machines —Principles and Practices' by Jesse W. Stribling. We do not, however, have the issues of September, 1947 and February 1948. It will be appreciated if you will supply us with these two issues so that we will have the series of articles complete."

SAMUEL E. CARR
Belmont Throwing Corp.
Belmont, N. C.

". . . and with this control chart, we control our control charts."

..."so we kept trying Mathieson!"

..."now we're getting more alkali. Mathieson supplied us from their expanded output."

What's your need—heavy chemicals for greater production... new products...a new plant? Be sure to check with Mathieson. Our recent expansions were *planned* to include new customers. If you're in an area served by Mathieson, or will locate in one, we may find ways to supply you, too. Mathieson Chemical Corporation, 60 East 42nd Street, New York 17, N. Y.

Mathieson
CHEMICALS

Caustic Soda...Soda Ash...Bicarbonate of Soda
Liquid Chlorine...Chlorine Dioxide...Ammonia, Anhydrous & Aqua...HTH Products...Fused Alkali Products
Dry Ice...Carbonic Gas...Sodium Chlorite Products
Sodium Methylate

try Mathieson

ESTABLISHED 1892 • PLANTS AT NIAGARA FALLS, N. Y., SALTVILLE, VA., LAKE CHARLES, LA.

Textile Industries

NOVEMBER
1948

Again We Prepare for War

THREE and one-half years ago, most of us were under the impression that we had won the war in Europe. Our avowed enemies were destroyed. Italy was prostrate and bankrupt, and Germany so thoroughly smashed that it seemed to offer no threat to peace for generations. With the European war out of the way, the question of settling with Japan was a mere matter of routine and time. Then, surely, we could pick up our marbles and go home to enjoy in peace and prosperity the fruits of our hard-won victory.

Unfortunately, while our avowed enemies were destroyed, the real enemy that we had been fighting, we had been strengthening in one area of the world as we fought it in another. Our real enemy was an idea rather than a nation, or set of nations. This idea was the belief that freedom was a mirage; that people were incapable of directing their own government, and that only through despotism could the affairs of a nation be properly regulated. A natural extension of this idea was that ultimately one despotism must control all peoples in order to secure peace throughout the world. The peace of slavery.

In 1939, there were three principal proponents of this theory of government among the important nations. In Germany, the front for this tyranny was called Nazism, or Fascism. In Russia it was termed Communism. In Japan it was Imperialism. The window dressing in each case was a little different; the slogans varied, and the methods were somewhat different, but in each case the principle was the same.

The believers in this principle held that there were no such things as human rights, and that the lives and destinies of all people should be entirely at the disposal of the tyrant and his satellites. This is a very old idea, which goes back into the roots of history, and for many thousands of years the people, as well as their despots, usually seemed to agree that only a totalitarian government could rule successfully.

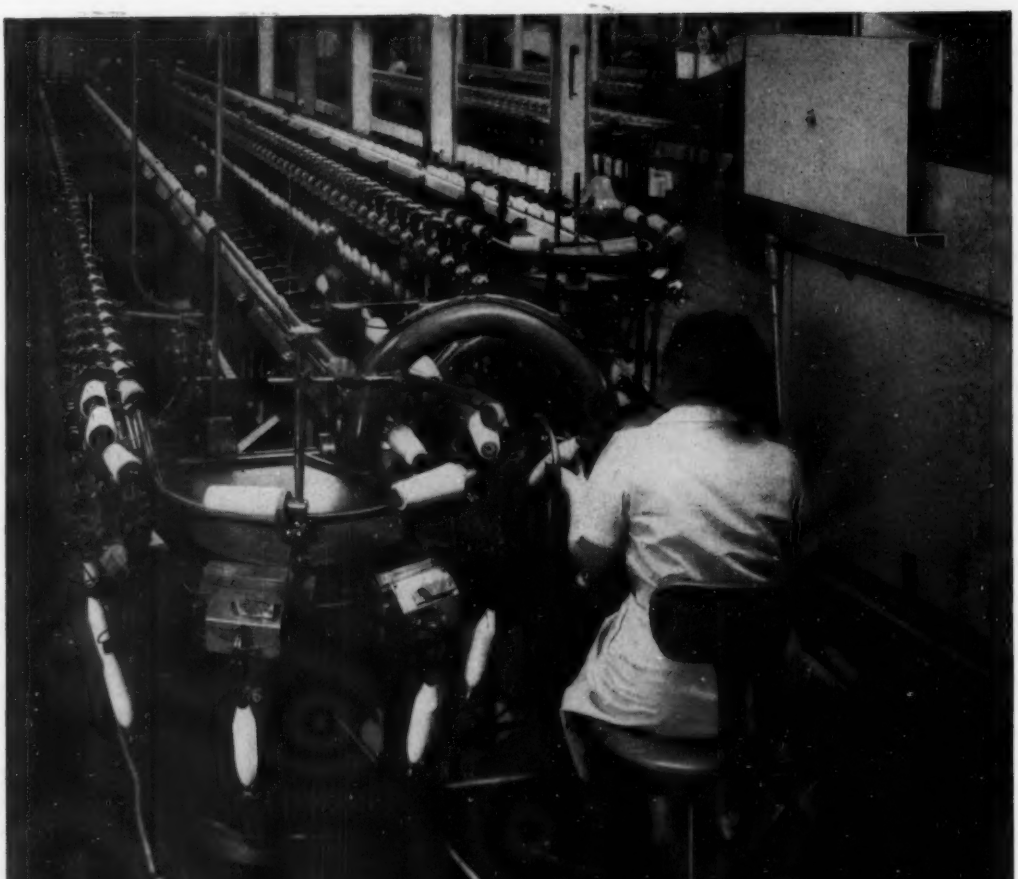
Something more than 700 years ago, the English people began to think differently, and for about 500 of these 700 years, the people of England were gradually learning from year to year, and century to century, how to govern themselves and how to trim the wings of over-ambitious monarchs with yearnings for the good old times when kings were kings and ruled as they pleased.

By the time America was settled by the English, this idea of popular government had taken such firm root that despotism, as practiced in Asiatic countries and medieval Europe, was totally unknown in the North American colonies. The tyrannical acts against which the colonies rebelled, and which impelled them to establish an independent nation, were so far from the ruthless tyranny which governed Germany, and which governs Russia today, as to seem almost benevolent by comparison.

The believers in tyranny held that there were no such things as human rights, and that the lives and destinies of all people should be entirely at the disposal of the tyrant and his satellites.

We, and our ancestors for generations, having lived under a form of democratic government and having known nothing of real tyrannies and arbitrary despotisms, find it hard, if not impossible, to visualize life under such a form of government, but we must always, instinctively, realize that any rapidly expanding despotism is the deadly and implacable enemy of our nation and our way of life. A tyranny confined to some unimportant country might be of no political concern to us, but when despotisms begin to expand, as Japan was expanding in Asia; Germany in Europe; or Russia in both Asia and Europe, it is inevitable that these despotisms will soon collide with each other, and the survivor will then set about the business of establishing a universal despotism by overwhelming the free peoples of the earth. In the eyes of despots, a country like ours sets a bad example for people who are the slaves of their rulers.

IT WAS inevitable that Germany and Russia must collide sooner or later. Two powerful totalitarian tyrannies, side by side, are much too dangerous to each other. We can not recall any case in history where two strong despotic governments ever dwelt side by side in peace for long. The German and Russian ruling cliques were therefore each other's natural enemies, and both of them were our natural enemies. Neither the German peo-



Reduce Operator Fatigue and

Increase Winding Production

with

ABBOTT Automatic WINDERS

A new long-lasting feature and one of the biggest winder improvements in years, particularly to the mill that winds wool, worsted, or spun fiber yarns, is the Abbott carboloy steel insert on all thread guides.

The Abbott principle of a moving assembly line reduces operator fatigue to a minimum. Operators sit down while working, set full bobbins in a rotating magazine and doff full packages—ONLY TWO OPERATIONS FROM ONE COMFORTABLE POSITION.

The result is more bobbins tied in per hour than on any other equipment, increasing your winding production. Some installations are producing up to 1000 bobbins per hour per operator.

ONLY ONE OPERATOR PER ABBOTT Automatic WINDER. Regardless of the length of the machine, which is determined by the average yardage of bobbins to be run out in one circuit, only one operator per machine is required—a saving in operational overhead cost results, as floor labor is largely eliminated in this modern method of winding.

Write for further information to:

ABBOTT MACHINE COMPANY
WILTON, NEW HAMPSHIRE
SOUTHERN OFFICE, GREENVILLE, S. C.

ple nor the Russian people necessarily have been, or are, our enemies, except in so far as their ruling cliques have made them so. Our country has several million excellent citizens of German descent and probably several millions also of Russian descent. If the Germans and Russians themselves were our enemies it was probably because their rulers had made them so. Under different rulers, or under self-rule, they might have been our ardent friends.

Therefore, when, through the chances of war, we accidentally became the ally of the Russian government in its contest with the Hitlerian government, we were actually helping and strengthening a despotism fully as obnoxious as anything Hitler had to offer. As far as our own national interests were concerned, we might just as logically have been allied with Hitler to destroy the Russian government as to be allied with the Russian despotism to overwhelm Germany. Germany was no greater threat to our national security than Russia; it was simply a more immediate threat, as we are now beginning to realize. Now, with the menace of Germany out of the way, the Russians may prove to be an even more serious threat than the Germans.

Just how serious this threat is, we will probably not be able to determine without war. The Nazi, or Fascist, ideas made relatively little progress in the United States, and in our war with Germany we had very little trouble with Fifth Columnists. In a war with Russia, there is every reason to believe that we would have frightful and extensive trouble with these Fifth Columnists, because the Communists have been at great pains for many years to get themselves and their fellow travelers planted in important posts in our labor unions and in as many agencies of our government as possible.

We can all remember the serious disturbances in this country over our mild attempts to help the French and British against Germany so long as Russia was an ally of Germany, and how, on the very day Hitler invaded Russia, these same labor leaders and politicians who had been screaming the loudest about our depravity in helping the French and British, immediately switched over to become enthusiastic advocates of doing everything possible for those countries which they had been abusing the day before. Only war with Russia could possibly demonstrate to us the extent of the sabotage these Communists and their supporters could cause.

We often overlook the fact that Communism to millions of persons is a religion—a materialistic, atheistic religion—and that the adherents of this religion are usually unreasoning zealots. The prophets of this religion have convinced their followers that Communism is the only key to material prosperity and happiness, and that until the whole world either adopts Communism, or is forced to accept it, there can never be any real peace, happiness, or prosperity.

The fortunes of war often make queer alliances. A traveler set upon by highwaymen will cheerfully accept the assistance of other highwaymen, but if the traveler is wise, he will not forget that they are highwaymen.

There is nothing particularly new about this idea. Many primitive peoples were Communists. Any people, poor enough to find it necessary to pool their scanty resources, might find Communism a very useful and necessary way of life. However, experience through the ages had shown that possessions and Communism were incompatible.

It remained for a German economist named Karl Marx to develop the idea that the Machine Age, with its tremendous capacity for producing wealth, had now made Communism feasible, and that possessions could be so multiplied that everyone could have all that his heart desired if society were reorganized according to Communist principles so that all would share equally, and there would be plenty for all.

This doctrine has taken a powerful hold upon the imaginations of millions of persons. They stubbornly close their minds to any consideration of the fallacies of the theory, and fanatically persist in believing that a dictatorship, with absolute power over the lives of these hapless searchers for happiness, can change the most deeply rooted instincts of the human being in the course of a generation or so. Their idea seems to be that if human beings can be reduced to the status of cattle, they should be happy, just as well-fed cows and hogs are supposed to be happy. The Communists cheerfully admit that such an absolute dictatorship is necessary to force selfish and unreasonable people to accept the happy circumstances of a pig in a comfortable sty, with a well-filled slop trough.

The present ruling clique in Russia has used this theory of the dictatorship of the proletariat as a facade for one of the most ruthless, bloodthirsty, and terrible tyrannies that has ever infested our unhappy world. Most of us knew this when Russia and Germany negotiated their infamous pact which enabled Hitler to start the Second World War. We continued to know it until December 1941, when we suddenly found ourselves in a military alliance with this same government. From the beginning of this alliance until after the end of the war, our attitude toward the Russian government changed profoundly, but there is good reason to doubt if the attitude of that government toward us changed at all.

The fortunes of war often make queer alliances. A traveler set upon by highwaymen will cheerfully accept the assistance of other highwaymen, but if he is wise, he will not forget that they *are highwaymen.*

During the current year, we expect to spend for protection against our former ally about three or four times as much as it cost to run the entire government a few years ago. Next year we will probably spend more.

(This discussion will be continued in a later issue.)

One Million

Marquette

Roller Bearing Spindles with Full-Floating Footstep Bearing

NOW IN OPERATION

Write for illustrated catalog

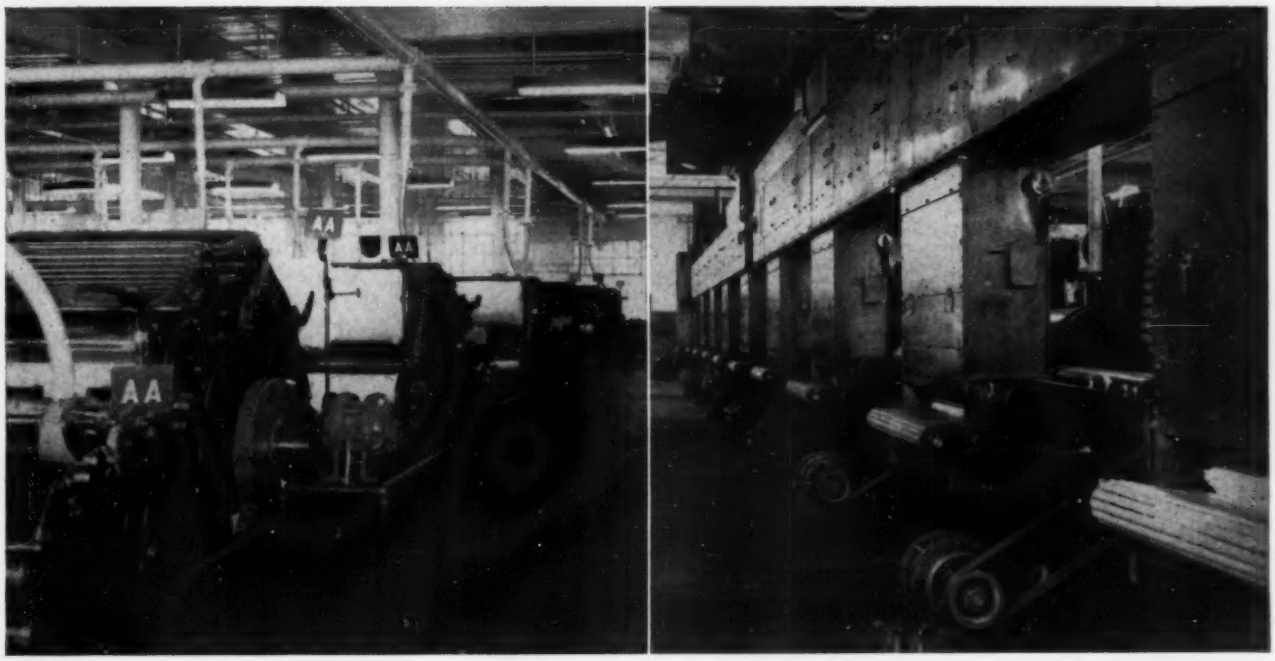
The Marquette METAL PRODUCTS CO.

CLEVELAND 10, OHIO

SUBSIDIARY OF CURTISS-WRIGHT CORPORATION

Also Manufacturers of: HYDRAULIC GOVERNORS • FUEL OIL PUMPS
WINDSHIELD WIPERS FOR AIRCRAFT, TRUCKS AND BUSES
FUEL OIL INJECTORS • PRECISION PARTS AND ASSEMBLIES

BYRD MILLER, WOODSIDE BLDG., GREENVILLE, S. C. • C. H. WHITE, 1229 PAMLICO DRIVE, GREENSBORO, N. C.
WILLIAM P. RUSSELL, BOX 778, ATLANTA, GA. • JOHN J. HALLISSY, 58 LIVINGSTON AVE., LOWELL, MASS.
IAN M. HALDANE & COMPANY, P. O. BOX 54, LONDON, ONT.



Conversion of machinery in card room (left) and picker room from group to unit drive was recently completed.

One phase of Exposition's modernization program—

Installation of Individual Drives

By MILTON C. MAY

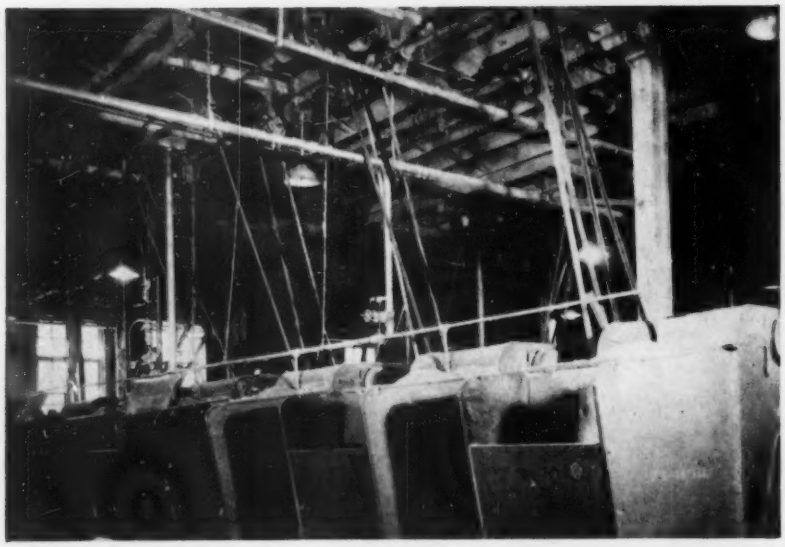
Associate Editor "Textile Industries"

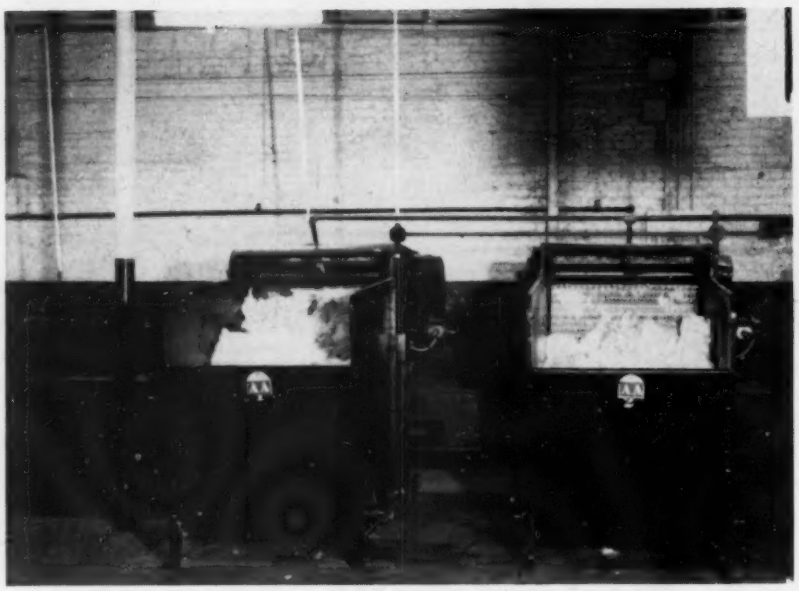
EXPOSITION COTTON MILLS located in Atlanta, Ga., started an extensive program of rebuilding, and replacing, overhauling, and adding new machinery and equipment in 1943. Since that time, much progress has been made toward renovating and modernizing the entire mill, and changes are still being made to improve production and to minimize machinery shutdowns because of mechanical failure.

One of the most outstanding changes on production machinery is the adoption of individual motor drives throughout the plant. This phase of the change is now in the process of completion.

Results Following Installation of Individual Drives. Acording to the management, some of the results obtained from the use of individual drives are as follows:

(1) Ceilings are kept cleaner.
(2) Production machinery is cleaned better and easier.
(3) Less lint or trash is thrown into the work.
(4) Less cleaning and maintenance painting of walls and ceilings.
(5) Less maintenance of bearings and pulleys. Belt repairs have been reduced.
(6) Static electricity has been





Left, views in opener room before (upper) and after installation of unit drives. In addition to improved appearance, greater efficiency is claimed by Exposition's management.

eliminated as a production problem.

(7) More uniform machine speeds aid in quality control.
(8) One machine can be stopped without affecting the operation of other machines.
(9) Improved safety conditions.
(10) More efficient use of power.
(11) Reduction in cost of lubricants.
(12) Better lighting conditions.

The unit drives will pay for themselves in 10 to 12 years in the savings in maintenance and replacements, according to the management at Exposition.

Opener Room. In the opener room there are 24 hoppers, arranged 6 hoppers per line. All of these have been equipped with new motor drives that have ball bearings throughout. Better feeding is said to result, and much less maintenance is reported.

Picker Room. Two lines of pickers lead to a No. 6 condenser into a Saco-Lowell overflow box. These are also equipped with individual motor drives.

Card Room. All cards were rebuilt and were converted to individual electric motor drives. Both Westinghouse and General Electric motors were furnished by Link-Belt Company. These were installed by the mill. Cutler-Hammer switches are used on the electric motors. These special switches provide for reversing the cards for grinding.

All of the cards are now equipped with Link-Belt Silverstreak silent chain drives.

The machines are spaced so that there is a distance of 34 inches between end flanges of drums on adjacent cards. The complete driving unit projects 19 inches beyond the drum flange, thus permitting spacing at close intervals. The drives are mounted on brackets above the floor level, and they are installed on alternate sides of the cards to permit more space for safer walkways.

The accompanying illustrations show the difference in appearance and functional arrangement of the card room before and after the change was completed.

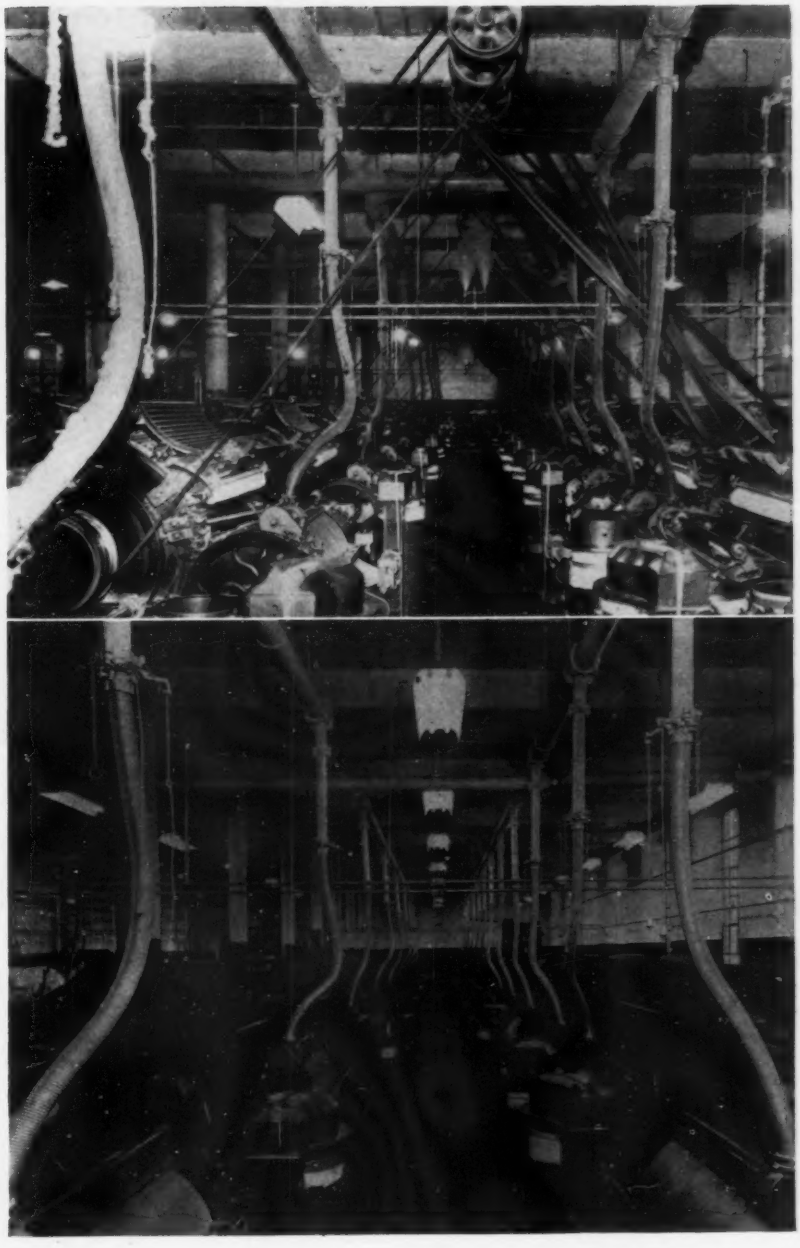
The cards are stripped after 220 hours of operation. This is done with a motor driven stripper roll which removes motes and trash not removed by the vacuum strippers.

The stripper roll is driven with a ¼-horsepower motor which operates at 1200 rpm. The motor is directly connected to a planetary gear which has a ratio of two to one.

The cards are still ground by the same method except that a cover is raised to actuate a snap switch which reverses the motor. This operation can be performed with little loss of time.

Spinning Room. All spinning is now operated by individual drives. Both V-belt and flat belt Rockwood drives are utilized throughout the spinning room. Fifteen warp frames were changed from band drive to tape drive, and less slippage is reported for the tape drive.

All new spinning equipment was



Right, views in card room before (upper) and after changeover to individual electric motor drives. Better lighting and less danger of accidents are benefits derived.

Photo courtesy, General Electric Co.

installed with tape drive, and 132 new warp spinning frames have been placed in production. Thirty-two of these frames have Allis-Chalmers vari-pitch drives (sheave is provided for variation of speed). Vari-pitch drives have been installed on 76 new Whitin filling frames.

Weave Room. Plans call for the installation of 1000 new looms equipped with individual electric motor drives. Five hundred new 44-inch Draper X2 looms already have been placed in operation. To be installed in the immediate future are 168 XD looms. All new looms in operation are equipped with unit drives.

The changeover was initiated in anticipation of keen competition in the future. The objective is to build a mill to produce better quality goods, faster than before, with improved working conditions and employee morale.

Coating for Bale Ties to be Tested by Mills

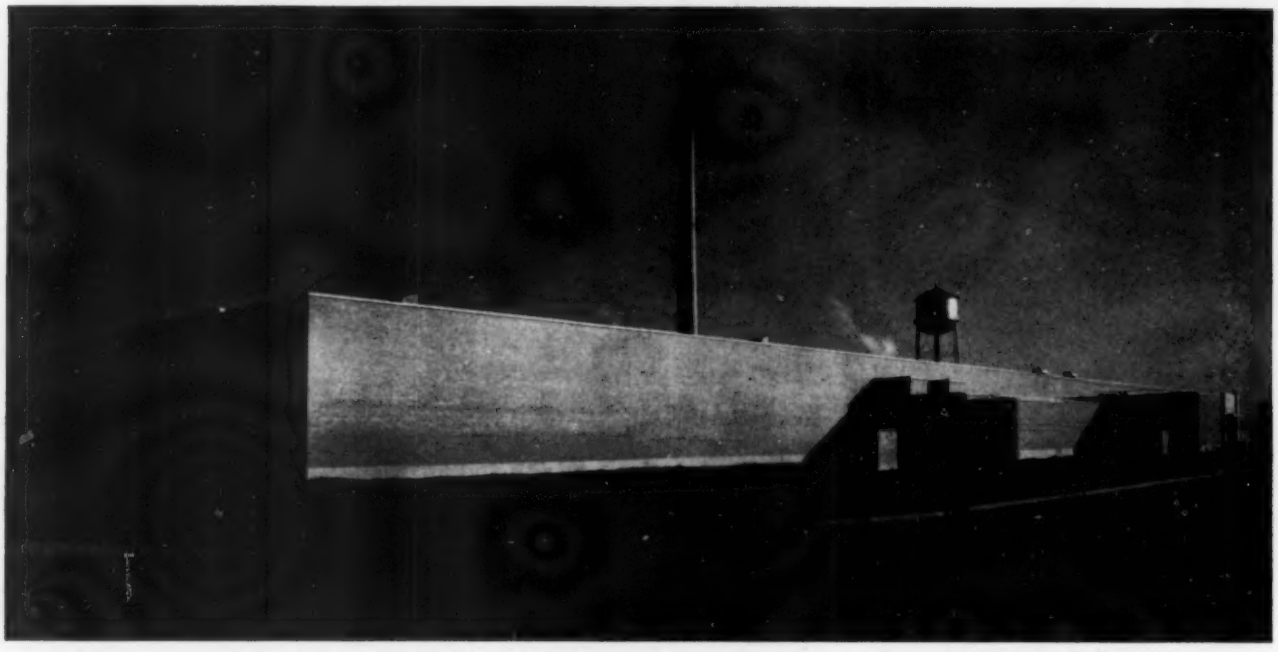
A COATING for steel cotton bale ties which will prevent rust and may eliminate complaints formerly made against asphalt coated ties will be tested by spinning mills. Asphalt coated ties have caused manufacturers of cotton goods considerable trouble in the past when the asphalt was carried through mill processes and failed to be removed in finishing operations.

The special coating is the product of wartime research, is colorless, and is available from more than one concern. It can be applied with equipment now being used at steel mills for coating ties.

Manufacturers say that the bale tie coating will withstand high temperatures, dries quickly, and has a low viscosity. There also is said to be no residue remaining on the tie, a factor which led to complaints against asphalt coated ties.

Accelerated tests in which the coating was subjected to conditions of salt air, damp air, and ultraviolet rays indicated that the material will give bale ties reasonable protection under most conditions for periods in excess of two years.

Asphalt coating has been used for ties in the past because of its low cost and rust-protective qualities. Representatives of the cotton mills decided to submit the liquid to tests on cotton and cotton cloth to see if the fabric would be damaged should some of the coating get into the fiber. It was indicated, however, that the coating will not rub off the tie onto the bale.



Exterior view of Colonial Mills' new Clarksville, Va., rayon finishing plant.

Colonial Mills Build Modern

Filament Rayon Finishing Plant

Windowless air-conditioned plant features drainage system which keeps room dry and reduces vapor to minimum.

Photos courtesy, C. M. Guest and Sons

ONE OF THE SOUTH'S largest and most modern filament rayon finishing plants was recently placed in operation at Clarksville, Va., by Colonial Mills, Inc. Designated Clarksville Finishing Division, Colonial Mills, Inc., the plant proper consists of three buildings—the dyeing and finishing plant, the steam plant, and the filter plant. All of these are of sturdy brick-steel construction. The over-all floor space in these buildings is over 130,000 square feet. This will soon be increased with a new addition now under construction.

Dyeing and Finishing Plant. The principal structure of the three is, of course, the dyeing and finishing plant which will process grey goods received from other segments of the Colonial system. It embraces more than 126,000 square feet of space on one floor, is artificially lighted, and has forced filtered ventilation.

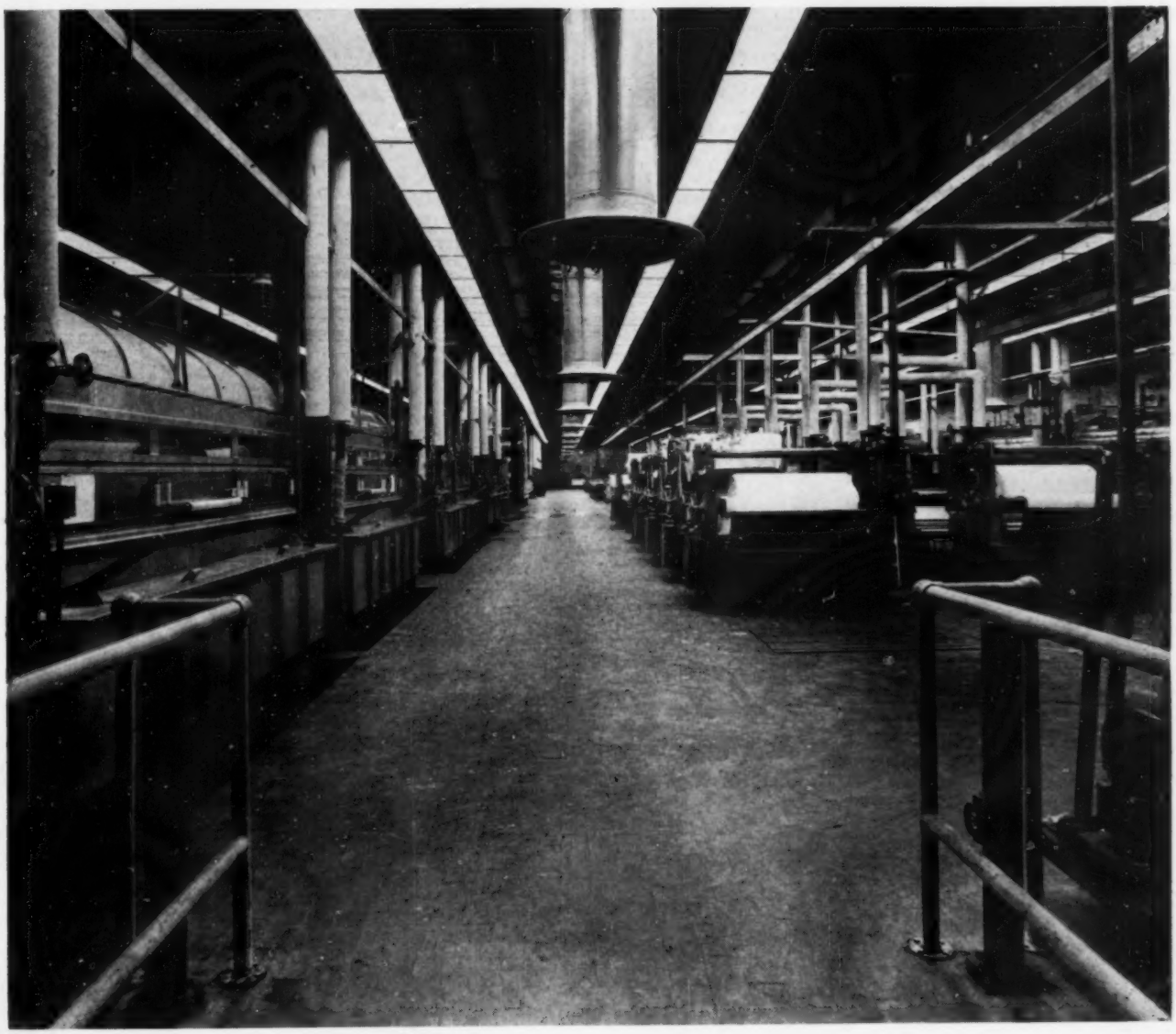
About 40,000 square feet of the floor in the dyeing and finishing plant are paved with a special acid-resisting brick which protects the floor from dyestuffs. The roof of the main building is of the flat built-up type on treated wood planks which are three inches thick. It has a vapor seal, two inches of cork insulation, and a tar, felt, and gravel roofing. Long-span roof trusses have eliminated the necessity for columns within the building.

An outstanding feature of the dyeing and finishing plant is the drainage system in the dye house which keeps the room dry and reduces vapors to a minimum. To get these results a large box culvert was constructed under the full length of the plant. Waste water from the dye becks and jigs falls into this conduit with such rapidity that it has little time to vaporize. A further check on vapors is accomplished by a vapor absorption and ventilation system which permits close humidity control. Ducts are made of stainless steel.

Located on the front of the main plant structure are modern air-conditioned offices equipped with acoustical tile ceilings, recessed fluorescent lighting, and asphalt tile floors.

Steam Plant. Steam for the operation of the plant is generated in a five-story building north of the dyeing and finishing plant. The steam plant is equipped with three boilers, two of 500 hp and one of 750 hp. These boilers are coal-fired but may be readily converted to oil by the use of standby equipment. A dust-free ash removal system has been provided. Ashes are removed from the hoppers by a vacuum system and carried through acid and wear resisting pipes to an elevated storage

Right, scene in the cloth inspection room at the Clarksville Finishing Division. Below, the wet finishing room. Note recessed fluorescent lighting.



silo. The ashes are then dumped into trucks through a scuttle in the bottom of the silo.

Process Water. Water pumped from the river supplies the filtering plant, which can process 2½ million gallons of water daily. Filtered water is stored in either the 215,000-gallon elevated tank or a clear well reservoir of 250,000 gallons capacity.

After water has been used in the dyeing and finishing process, it is returned to the waste disposal plant where all chemicals are removed before it is returned to the river.

Housing for Employees. Twelve modern homes have been constructed on large lots in a wooded section for use by executive personnel. These houses are all architecturally different, yet harmonious. Since the majority of the plant employees live on the farms surrounding the plant, it was not necessary to provide additional housing.

Recreational Facilities. An employee recreational area covering about 300 acres of land is now under development. In addition to an 18-hole golf course, all-weather tennis courts and fields for other forms of recreation have been provided. Incidentally these recreational facilities have been made available to all citizens of Clarksville.

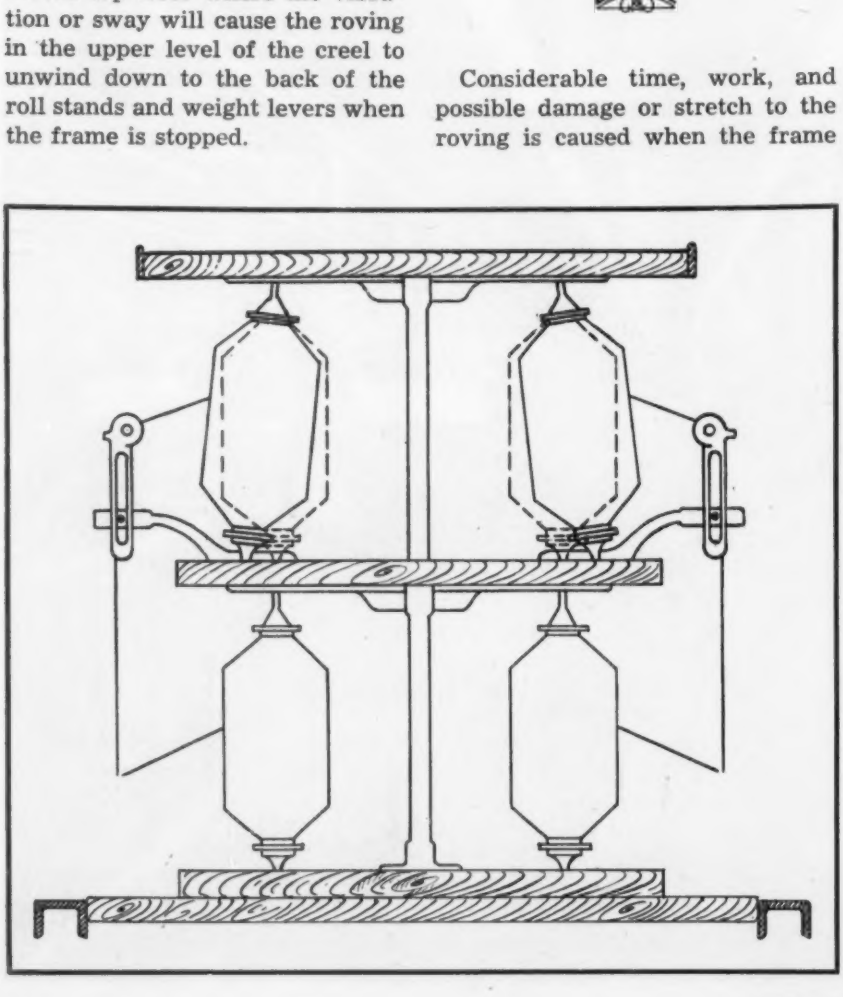
A century-old mansion has been renovated to serve as a guest house for out-of-town persons who visit the plant. Also, a modern club house complete with locker rooms, golf shop, etc., is nearing completion.

C. M. Guest and Sons of Anderson, S. C., and Greensboro, N. C., were the builders. Biberstein and Bowles of Charlotte, N. C., were the engineers.

Preventing Roving From Unwinding When Frames Are Idle

By S. G. TABOR

IN MANY mills, especially the older ones, there is considerable vibration or sway to the buildings. The spinning room is usually on the top floor where the vibration or sway will cause the roving in the upper level of the creel to unwind down to the back of the roll stands and weight levers when the frame is stopped.



Considerable time, work, and possible damage or stretch to the roving is caused when the frame has to be started because the roving must be turned back by hand to wind up the slack. This trouble is much worse when overhead cleaners are used.

When this difficulty arises, it is a common practice to blunt the bottom of the skewers to make friction enough to keep the roving from unwinding when the frame is stopped. This practice is not satisfactory in many instances.

The most satisfactory way we have found to overcome this trouble is to install new porcelain steps in the middle creel board about 1¼ inches off center so that the bobbin will be at a slight angle instead of plumb (see accompanying illustration). This does not increase the tension of unwinding to any amount, and it will stop the roving from running down on the roll stands and weight levers when the frame is stopped.

We have found this arrangement very satisfactory when a number of frames have to be stopped from one shift to another, and in most instances it is possible to allow the overhead cleaners to continue to run even when the frame is stopped. The cost is very small, and the change simply requires boring new holes and installing new porcelain steps.

Photos courtesy, Eriez Manufacturing Co.

Tramp iron on this magnet might have been the source of a fire or mechanical damage to machines.

Magnets Protect Textile Machines

By FRANCIS A. WESTBROOK

A SURVEY conducted by the Associated Factory Mutual Insurance Company reveals that about 50 per cent of the fires in cotton mills are in the opener and picker rooms. Of these conflagrations, 78 per cent are due to extraneous metals in the raw cotton.

Tramp iron, usually consisting of bale ties and buckles, nails, screws, wire, miscellaneous hardware, and even bottle caps are likely to spark on contact with machinery parts and ignite the raw materials. This danger may be readily averted.

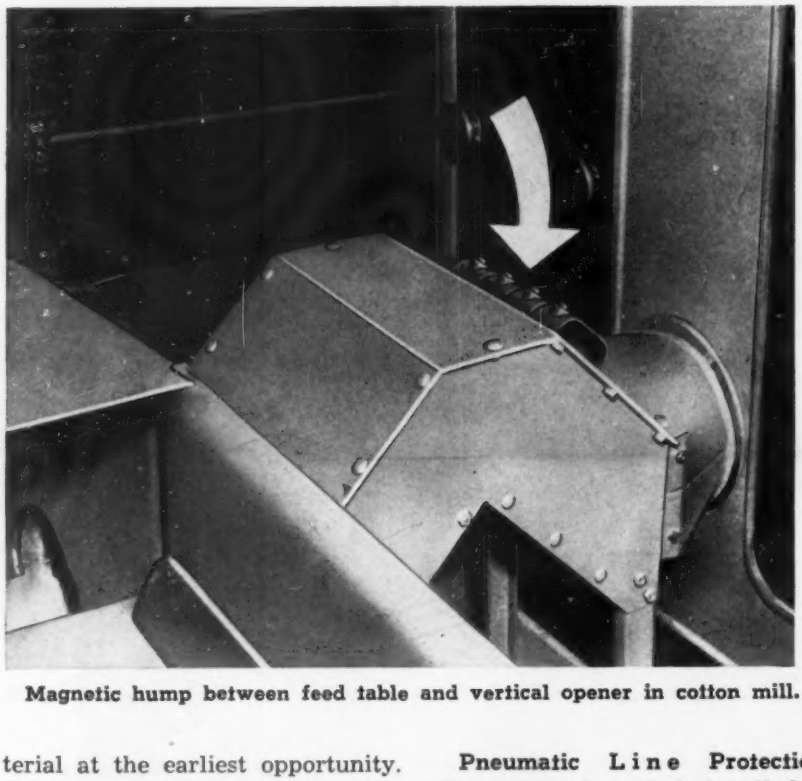
Many textile plants are modifying equipment with magnetic separators to safeguard against this hazard. As an added bonus, the magnets also protect apparatus from mechanical damages caused by iron contaminated stock.

Permanent Magnets. Permanent magnets, requiring no electrical circuits, have been designed to remove ferrous metals from almost any kind of fiber processed. The magnets are installed in opening lines of cotton mills, and in pickers, garnetts, and the wash section of scour bowls of woolen mills.

There are many specific vantage points where magnetic protection may be afforded, depending on specifications peculiar to the individual mill's operations.

Location of Magnets. The magnets can be located between the spiked apron feeder and the vertical opener in a connecting pneumatic line. Pickers should be shielded at the top of the spiked apron feeders. Wool cards, garnetts, and scouring bowls with spiked apron feeders may be similarly protected. When tramp iron trouble is experienced, consultation with the manufacturers of magnetic equipment would help to determine the most effective application.

Generally, the magnetic separators should be placed between the bale breakers or blending feeders and the first cleaning operation to dispose of foreign ma-

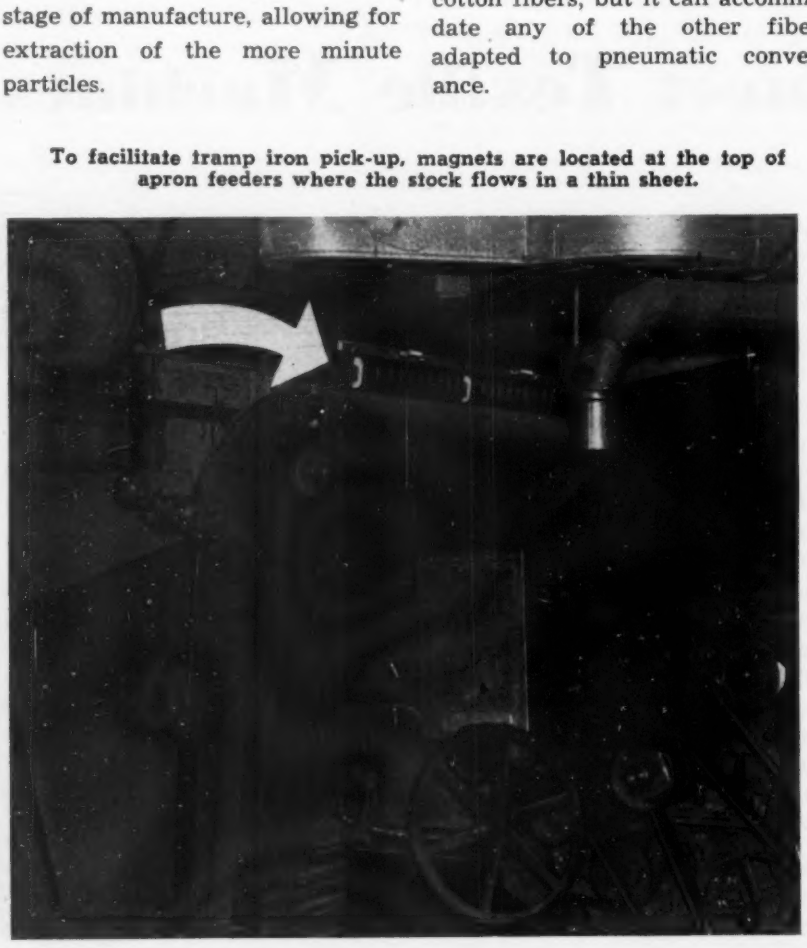


Magnetic hump between feed table and vertical opener in cotton mill.

terial at the earliest opportunity. Further protection may be implemented by separators in the feeders of garnetts and cards since the stock has been well-opened at this stage of manufacture, allowing for extraction of the more minute particles.

Pneumatic Line Protection. When opened stock is handled in pneumatic lines, the magnetic hump type would be suitable. The hump was originally designed for cotton fibers, but it can accommodate any of the other fibers adapted to pneumatic conveyance.

To facilitate tramp iron pick-up, magnets are located at the top of apron feeders where the stock flows in a thin sheet.



The hump is located in the conduit between the bale breaker or feed table and the vertical opener. The unit is constructed so that material entering the hump first strikes a lower magnet. Here, the bulk of tramp iron and steel will be captured. As the stock emerges on the opposite side of the hump, it strikes an upper magnet which will attract the remaining ferrous debris. The system may be installed horizontally or vertically according to the routing of the conduit.

Machinery Protection. The hoppers of feeds for blenders, pickers, wool cards, garnetts, scour trains, and similar preparatory equipment may be readily equipped with magnetic separators. The magnets are mounted at the top of the apron feeders where the stock flows in a thin sheet, facilitating tramp iron pick-up.

It is unlikely that any additional foreign material will be introduced into the stock after this preliminary processing.

The permanent magnets are comprised of rectangular plates mounted on angle-iron supports inside the frame of the feeder, and set from 1½" to 2" above the apron spikes. The plates are hinged, and may be opened for cleaning.

Magnetized head pulleys are available for the discharge end of conveyors. They can be suspended over belt conveyors or the slatted aprons of feed tables.

Magnets will pay for themselves many times over in savings on machinery repairs, even if only occasional tramp metal is detected. Interference with production schedules is reduced to a minimum also.

Life of Magnet. There is some concern over the longevity of a permanent magnet. The Ritchie spirit compass is serviceable after 65 years. The magnets used for speedometers usually out-survive the vehicles in which they are incorporated despite vibrations, impact, and high velocity. With the modern magnalloys and improved construction, permanent magnets now possess greater strength, stability, and longevity.

TEXTILE INDUSTRIES *Presents*

Modern Equipment & Processing Review

READERS of this magazine are receiving for the ninth time since 1931 our Modern Equipment and Review number, which lists and describes equipment and accessories made available to the textile industry recently. Specifically, this section covers products developed since October 1947—the issue of our last such review.

An issue of this type not only brings to light new products, but it serves as a permanent reference, and mill men will find it helpful throughout the year.

The equipment review section was prepared from information furnished by cooperating companies, and though in some instances additional details will be useful to the reader, further data will be furnished if request is made on the card appearing on page 205.

Wool Top Dyeing Machine

A top dyeing machine said to produce a uniformly dyed top without disturbing the wool fiber, eliminating the need of recombing after dyeing, is now available.

The machine is equipped with acid and dye tanks with controlled volume feeds which permits the dye liquors to be properly mixed before reaching the tops. The entire process can be operated manually or by a cycle control.

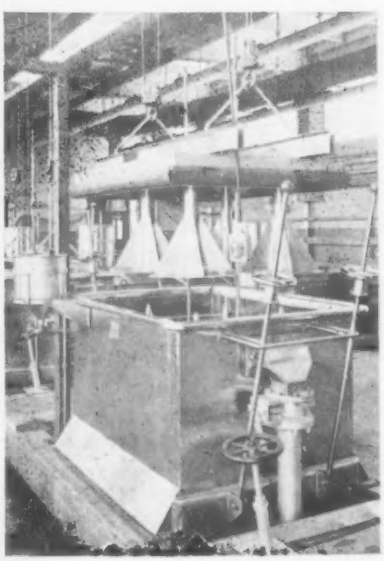
Tanks are equipped with covers which eliminate disagreeable vapors while the machine is operating. The covers, when raised, serve to strip the tops from the spindles.

The Allen-Worcester top dyeing machine is manufactured in five sizes: 150, 300, 450, 600 and 750-pound capacities. The entire unit is made from stainless steel for corrosion resistance.

William Allen Son's Co., Worcester, Mass.

For additional data, request item K-101, using business reply card on page 205.

Wool top dyeing machine (Allen).



Thickness Measures

The addition of two .0005"-graduated models, a simple "O" adjustment, and fixed parallel contacts feature an improved line of dial thickness measures. The new models are especially suited for accurate measuring of tissues, cellophane, membranes, and fibers.

Weighing one and one-half ounces and with a case thickness of one-quarter of an inch, these pocket-watch-size visual micrometers enable the user to make on-the-spot measurements of both compressible and non-compressible material and objects: rubber, felt, cloth, paper, metal glass, plastics, etc.

The index finger, drawn back on the knurled wheel, raises the upper anvil, permitting insertion of the piece to be measured; lifting the finger releases the wheel and allows a uniform spring pressure to close the upper anvil onto the work surface.

Decimal equivalents are stamped onto the back of the case on the English-measure models. An attractive, grain-leather, snap-button case is provided; also instructions for operation.

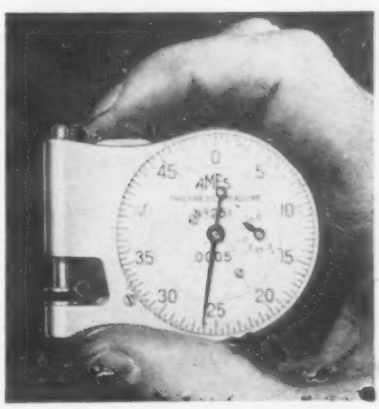
B. C. Ames Co., Waltham 54, Mass.

For additional data, request item K-104, using business reply card on page 205.

Aluminum Barrel for Loom Beams

An extruded aluminum section has been developed to replace wooden loom beam barrels. Designated Sec-

Thickness measure (Ames).



tion No. 34040, the aluminum barrel has the same outside diameter as the wooden barrel and the ⅜" x ⅜" longitudinal groove for starting the yarn.

Installation of the aluminum barrel is easily accomplished at the mill, re-using the cast iron beam heads, steel tie rods and shaft. The barrel is adaptable to both flat type and recessed type beam heads.

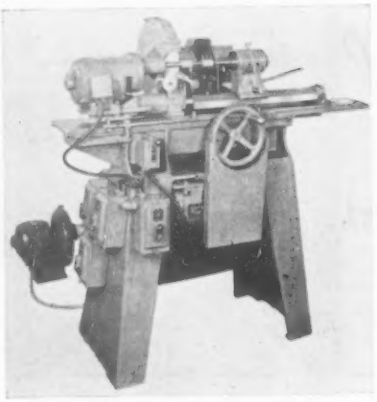
The aluminum barrel is furnished cut to required lengths plus commercial sawing tolerances, and requires a facing operation by the user. It is available in 61S-T, which is recommended for nylon or acetate rayon, or 63S-T5, for use with cotton or woolen yarns.

Aluminum Company of America, 1939 Gulf Building, Pittsburgh 19, Pa.

For additional data, request item K-102, using business reply card on page 205.

Cot Buffing Machine for Synthetic Cots

A new heavy duty type buffing machine which has the added power for grinding synthetic rubber cots has been developed. It is a high production machine designed for constant use in large mills.



Cot buffer (Armstrong).

The machine is of three motor design with motor equipment totaling 2⅝ hp, featuring a 2 hp grinding wheel drive motor and a ¼ hp spindle drive motor. An automatic traverse motion equipped with a ⅛ hp motor is supplied as standard equipment. This motion has a new type reversing switch which allows the cot to be buffed in two directions without resetting. This back-and-fourth buffing operation provides a better finished surface on the cot, it is claimed.

A separate ¼ hp motor-driven exhaust for the unit takes care of dust exhaust, leaving the full power of the main driving motor for the grinding wheel operation. The new heavy duty machine will handle roll sizes up to 18" long and 3" O.D. With adaptations the range can be increased to handle rolls up to 7" O.D. so that it can be used as an efficient grinding unit for such large diameter rolls as Bradford worsted spinning and drawing rolls.

Armstrong Cork Co., Lancaster, Pa.

For additional data, request item K-105, using business reply card on page 205.

The Kellogg Loom

A new loom has been developed which is designed on the unit system, with each basic movement being an integral unit in itself. Conventional weaving motions are employed. Parts are precision manufactured and calibrated, and are made from long-wearing metals. Most of the basic motions may be replaced as a unit, permitting repairs and recalibration in the machine shop; this system is said to reduce downtime of the loom.

Anti-friction bearings and high pressure lubrication systems are used wherever it has been considered practical. At least two motions operate in a continuous bath of lubricant.

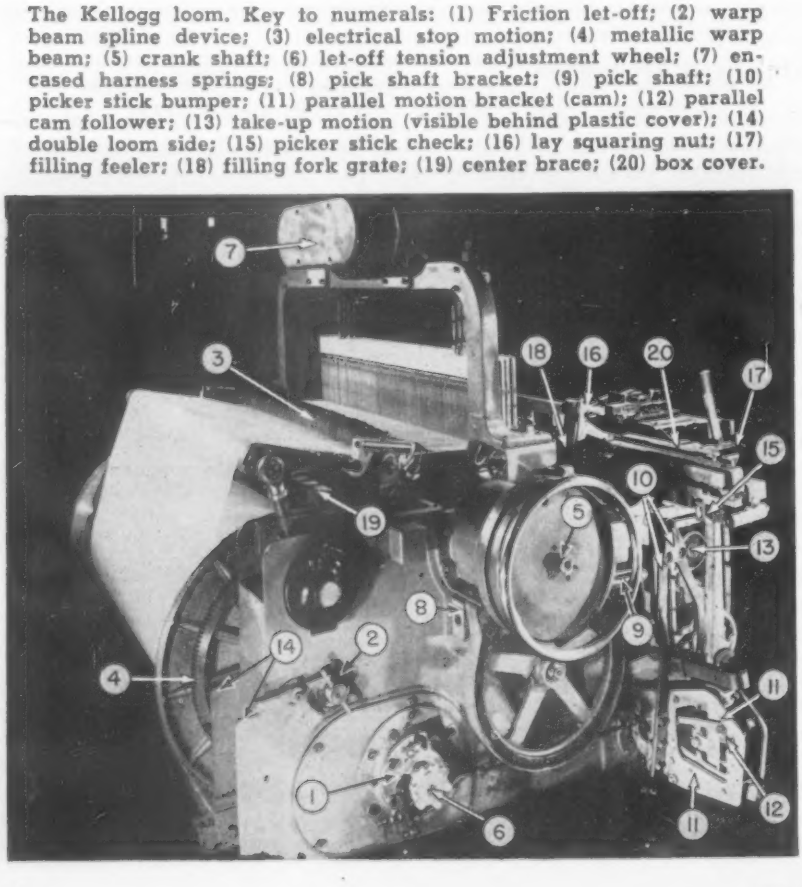
Cruising speed is suggested by the manufacturer at from 220-230 picks per minute. Though recent machine principles are involved in the manufacture and design, it is thought that overall retraining of operatives will be unnecessary because the fundamentals of accepted loom operation are retained.

Each loom side consists of two plate-steel frames between which many of the operating parts are located; the double loom sides on each side of the loom permit shafting for motions to rest in two bearings. Power is transmitted from a one horsepower motor by means of 3 V-belts. The loom is driven on short center through a double disc clutch. The adjustment for the clutch is made in a single operation from the outside and requires no tools.

The M. W. Kellogg Company, Danforth Ave., Jersey City, N. J.

For additional data, request item K-212, using business reply card on page 205.

The Kellogg loom. Key to numerals: (1) Friction let-off; (2) warp beam spline device; (3) electrical stop motion; (4) metallic warp beam; (5) crank shaft; (6) let-off tension adjustment wheel; (7) encased harness springs; (8) pick shaft bracket; (9) pick shaft; (10) picker stick bumper; (11) parallel motion bracket (cam); (12) parallel cam follower; (13) take-up motion (visible behind plastic cover); (14) double loom side; (15) picker stick check; (16) lay squaring nut; (17) filling feeler; (18) filling fork grate; (19) center brace; (20) box cover.



New Whitin Equipment

Two new blending feeders, Models N2 and N3, were developed this year. These units are constructed from fabricated welded steel. All shafts run in self-aligning ball bearings. Signal lights, dust fan, and sprinkler domes are standard equipment. The bottom apron is inclined and extended aprons are optional.

According to the manufacturer, one of the most noteworthy improvements is the permanently synchronized relative speeds of all moving members. Speeds are controlled by a variable-speed V-belt drive. When a new speed has been set, no further adjustments are necessary to obtain the correct pin apron stripper cylinder and pin cylinder speeds. There are no gears or pulleys which can be changed to upset balanced synchronization. The only two possible changes that can be made affect the size of the tufts of stock delivered and rate of production, it is claimed.

Model N2 is equipped with pin cylinder and is built for blending and feeding baled cotton. Model N3 has a light weight comb which is constructed with aluminum arms and cover; it is designed particularly for blending and feeding synthetic fibers, wool, cotton wastes, and card strips. Production for the N2 on baled cotton is up to 200 pounds per hour. The N3 unit will process up to 200 pounds per hour of synthetic fibers and up to 160 pounds per hour of card strips.

To meet the problem of maintaining a check on out-of-round bobbins, a bobbin tester was developed.

This bobbin tester has a slowly revolving spindle and two mounted indicators calibrated in thousandths of an inch. The spindle is driven by a reduction drive electric motor.

The tester is a completely self-contained unit. It will accommodate all types of bobbins commonly used today and is easily adjusted for any type of bobbin by removing the spindle and bolster from the tester and inserting another spindle and bolster to fit a fresh lot of bobbins to be tested.

Whitin Machine Works, Whitinsville, Mass.

For additional data, request item K-175, using business reply card on page 205, and specify equipment.

Axial Air Gap Motor Features Space, Weight Reduction

An axial air gap motor, which is primarily a flange mounted machine, has been announced. It may be installed with the shaft in either a horizontal or vertical position. To afford protective features in both positions, the design of the enclosing cover is slightly different for each type of mounting. The motor will operate just as efficiently in either position. This advantage will mean a reduction in the number of motor modifications required by the manufacturer of the driven machine, according to the announcement. With a stock of interchangeable covers, one type of motor may be used for all mounting positions.

The Motorgear (Fairbanks-Morse).

The motors are available for horizontal mounting, vertical mounting, and pivot base mounting. They are said to be ideal for installations where the size and shape of the conventional type of motor is a handicap.

Ventilation is accomplished by air passing through the louver at the front of the cover, and discharging through passages in the base of the cover where it joins the flange. Considerable space and weight reduction are claimed for these motors which are available in numerous frame sizes.

This motor is also available as a motor reducer. Known as the Motorgear, the unit is available in ratings from ¾ to 10 hp. It employs two ratios of single helical gears. The motor may be removed from the gear housing and run separately.

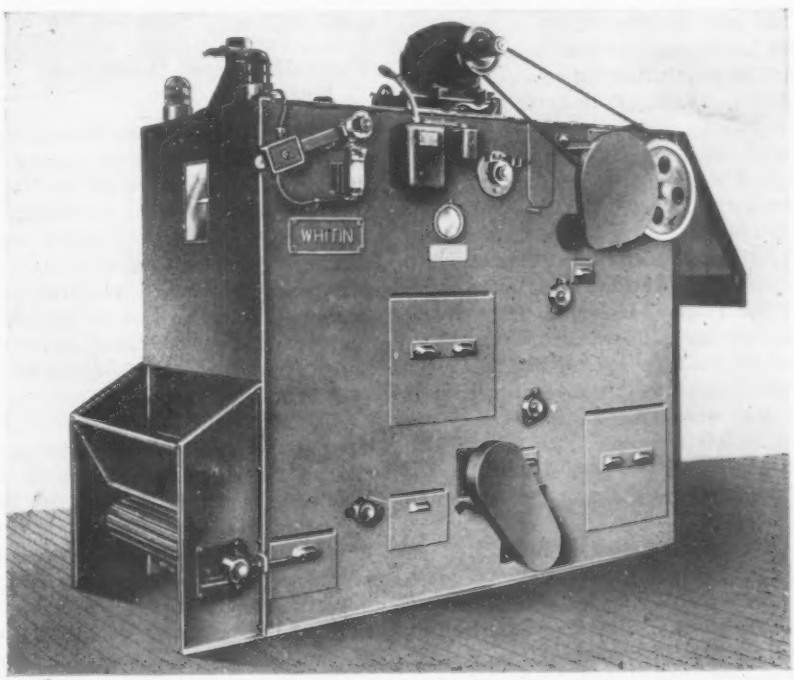
Fairbanks, Morse & Co., 600 South Michigan Ave., Chicago 5, Ill.

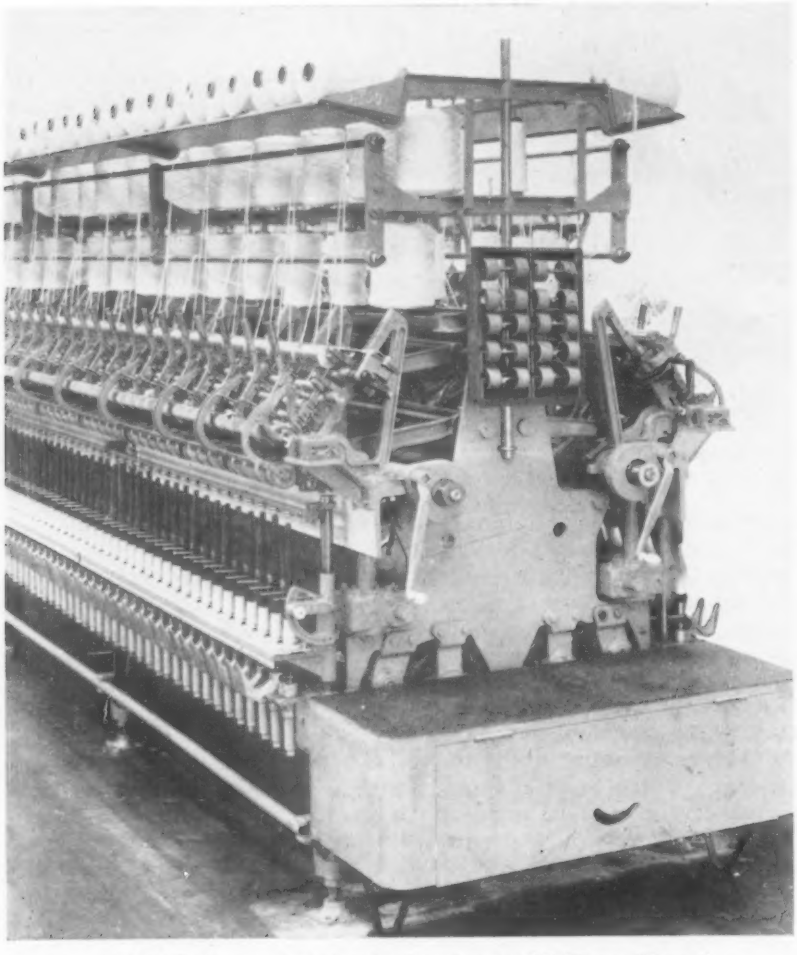
For additional data, request item K-176, using business reply card on page 205.

Synthetic Detergent by Wyandotte

A newly announced synthetic detergent, "Kreelon," is now available in any desired quantity. Kreelon, an alkylarylsulfonate of controlled quality, is recommended for use throughout the textile industry where economical surface active agents are required having efficient detergent, wetting, penetrating and rinsing properties in either hard water or

Model N2 blending feeder by Whitin for blending and feeding cotton.





French-type worsted spinning frame (McGlynn Hayes).

soft water, and in alkaline and acid media.

In kier boiling, Kreelon assists in the penetration of the caustic liquor and in emulsification and suspension of oils, waxes, proteins and pectoses natural to the fiber. It is an efficient detergent for use in the scouring of cotton, wool, silk, linen and synthetic fibers prior to dyeing or bleaching.

As a bleaching aid, Kreelon improves the wetting and penetration of the fibers. Its rapid wetting and penetrating properties recommend its use in package dyeing and as a dye bath assistant for the level dyeing of cotton, wool, silk, linen, nylon, rayon and acetate rayon. Kreelon is also of use in sanforizing, sizing and desizing, mothproofing, dye stripping and fulling.

Kreelon is now manufactured in three different grades.

Technical Service Department, Wyandotte Chemicals Corporation, Wyandotte, Michigan.

For additional data, request item K-177, using business reply card on page 205.

French-Type Worsted Spinner

A French-type worsted ring spinning frame capable of producing the complete range of yarns, including the fine counts heretofore considered the exclusive domain of the mule, has been developed. Substantial savings in labor and productive floor space without sacrifice in quality of yarns produced, have been made possible by means of the features incorporated in the new frame.

A patented six-line fiber control drafting field is utilized, and satisfactory yarn has been made on this frame with drafts as high as 20:1. However, it is believed that a draft of 15 is more practical for average staple wools.

Four of the six lines of rollers are adjustable and three of the six are 18 mm. in diameter, set very close together and immediately in back of the bottom front roller. Maintenance of an optimum balloon length during the entire build is attained on the new frame by elevating the relatively slow-rotating fiber-control draft field in synchronization with the traverse. This feature permits the use of high spindle speeds with freedom of vibration since the rapidly rotating spindles, driving cylinders, and tension pulleys are rigidly mounted. This device also gives a very uniform balloon and, in conjunction with a traversing lappet or "balloon controller," strains on the forming yarn are minimized, contributing much to its evenness.

There is an individual rising draft mechanism for each side of the frame, each set comprising a ½ hp motor driving a series of eleven screw jack mechanisms, connected by splined shafts. Flexibility of operation is made possible by use of an individual variable-speed drive for each side of the frame. This feature permits the production of two completely different yarns on the same frame, simultaneously. It also allows doffing, repairing, or adjusting either side of the frame while the other side remains in operation, thereby reducing "down time" per spindle hour.

The frame is built on a 3-inch pitch, with 200 spindles on each side. The diameter of the ring used is 2 inches. Spindles are of the break-ring type, tape driven, and run in self centering roller bearing bolsters. Tape drums are made from heavy wall seamless aluminum tubing in five-foot sections, dynamically balanced.

Twenty spindles are driven by each tape, with a "Jockey" or tension pulley for each section. Tape drums and driving shafts are spline connected for maximum driving contact and easy removal. In spite of the long traverse, there is only one inch clearance between rings. This has been made possible through the development of a revolving, plush-covered "anti-marriage" device.

A gear box, which is supplied for each side of the machine, includes a quick-change reversing lever for required direction of twist. Reverse twist is obtained by simply throwing the lever to the correct position. Ball bearings are used widely throughout the machine.

McGlynn Hays Industries, Inc., Belleville, N. J.

For additional data, request item K-213, using business reply card on page 205.

American-Made Swiss Weaving Machine

The American-made Swiss weaving machine does not have a conventional shuttle, bobbin, picking motion, race plate, or harness cams, but it does employ a warp beam, warp stop motion, harness and heddles, reed, and sand roll.

The shuttle is a small piece of machined steel approximately 3⅛ inches long and ½-inch wide, and each machine may require from 12 to 17 such shuttles, depending upon the width or widths of the cloth being woven.

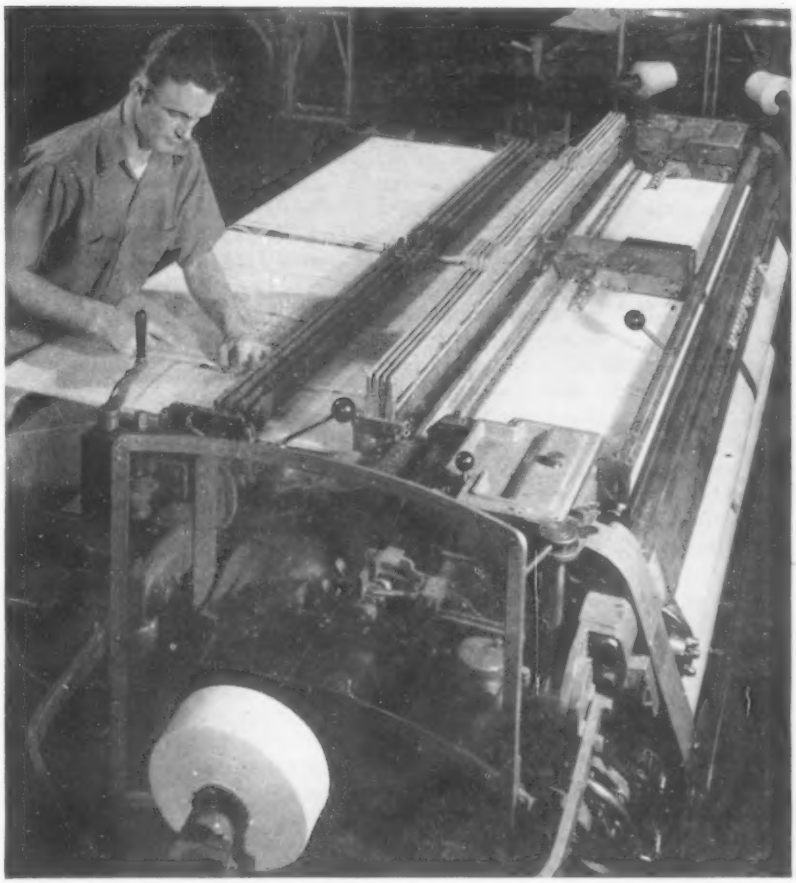
The shuttle guide, which serves as the race plate, is a series of steel loops extending across the "lay," through which the steel shuttle passes, never touching the reed or warp. This shuttle guide, by necessary camming action, is first in position (partially through warp) to receive the shuttle and guide it through the shed; when the reed moves forward in an arc for the beating-up motion, the shuttle guide then ducks below the fell of the cloth, retaining the filling in the shed until the time of beat-up.

The conventional filling bobbin is eliminated, the filling being supplied from a cone on one end of the weaving machine. Filling supply for each pick is placed in position by centering fingers, where it is gripped positively by the spring action of the shuttle, carried through the warp, released by the shuttle, tension applied to the filling from the opposite end to remove kink and tighten, and the tail is then cut and tucked into the selvage approximately 7/16-inch by a needle, located under the temple, which passes up through the warp and pulls the tail into the shed. The filling is positively held at a predetermined tension until completion of the beat-up.

The tucking of cut ends of filling is performed simultaneously on each edge of the cloth, irrespective of the number of pieces being woven.

Having supplied the pick, the shuttle, which has been stopped by friction in the receiving box, is pushed out of the box, drops onto a conveyor, and is returned to the left-hand side of the loom, where it repeats its performance.

The machine is capable of weaving a fabric 110 inches wide, or several fabrics totaling 110 inches minus one inch for each tucking device dividing the cloth. The machine has been operated at a speed of 235 picks per minute. Harness capacity is eight harnesses. These operate by direct cam motion both up and down, without straps or springs. Wooden guides on top of harnesses prevent their binding.



The American-made Swiss weaving machine (Warner & Swasey).

The Warner & Swasey Company, Cleveland, Ohio.

For additional data, request item K-214, using business reply card on page 205.

Variable Speed Motors

Several improved models of Varidrive motors in sizes from ¼ to 50 hp and with speed ranges from 1 to 10,000 rpm have been developed this year.

These new models embody several changes, principal of which is the use of the Autotaut spring tensioner, an involute spline to permit sliding of the internal Varidisc for changing speeds, a new design of control handle replacing the former handwheel and optional positioning of the control on certain models so that the control can be on the front, top or reverse side.

Operation of the Varidrive is simple. Speed of the rotor is constant. Speed of the take-off shaft is any rpm desired. Infinite speeds are obtained by use of reciprocal diameters of two Varidiscs housed within the unit. Action of the control handle changes the belt diameters from slow speed progressively to high speed, or any speed between.

U. S. Electrical Motors, Inc., Los Angeles 54, Calif.

For additional data, request item K-172, using business reply card on page 205.

Improved Desizing Agent

Rapidase, a standardized bacterial type amylolytic preparation for desizing, has been greatly improved, according to the manufacturer. Higher speed desizing can now be employed without impairment of activity at either high or low temperatures, it is claimed. The increased thermal stability of the new Rapidase permits almost instantaneous desizing at 200° F to 210° F.

Desizing in range operation is reported to be accomplished by 10 to 20 seconds steaming of Rapidase sat-

urated grey cloth, 60 to 90 seconds including washing.

Wallerstein Co., Inc., 180 Madison Ave., New York 16, N. Y .

For additional data, request item K-173, using business reply card on page 205.

Rotary Type Size Pump

A positive displacement, rotary type industrial pump is finding use in slasher rooms for pumping sizing. The pump is manufactured in both nickel alloy and stainless steel, and the pump head can be taken apart for cleaning and replacement of parts. The pump operates at approximately 300 rpm, depending upon the capacity that is required and, therefore pulsation in the flow of liquid has been reduced to a minimum. Agitation of the product has also been eliminated.

A rotary seal is built into the pumping chamber, thus eliminating all packing glands. It is non-aerating, and has a reversible inlet and outlet.

Waukesha Foundry Company, Waukesha, Wis.

For additional data, request item K-174, using business reply card on page 205.

New Welding Materials

Low temperature welding rods for use when welding cast iron, steel, malleable steel, bronze, nickel, and aluminum have been marketed. Reportedly, these rods can be used on delicate castings where little heat can be applied. The announcement stated that stresses, distortion, and brittleness caused by the high heat of oxy-acetylene or metallic arc welding are eliminated with low temperature welding which is made possible by these new low temperature welding rods.

A small diameter metal cutting electrode for cutting all thin sheet metals has also been announced. This new 3/32-inch diameter "Cuttrode" for stainless steel, bronze, nickel, and copper cutting permits simple, inexpensive operations.

Eutecrod 1805FC is a new development in the field of torch welding rods. According to the manufacturer, it is designed for joining copper, and its properties of thin flowing, high strength, and excellent affinity for copper, insure uniform deposits.

The need for a suitable welding rod for tight steel joints has been fulfilled with the production of a smaller diameter size rod for steel torch welding. The product is called Eutecrod 16 and is available in size 1/32-inch.

The manufacture of flux coated welding rods has been improved chemically and metallurgically by allowing for a greater and thinner flow of the joining alloy, according to this company. This rapid flow insures capillary action, smoother welds, protects the weld area from over heating and minimizes the possibilities of distortion and stress to the parent metal. The improved welding rods have been designated EutecRods.

A new product called "Anti-Capillary Compound" is available for use with Eutectic low temperature welding rods. This paste is designed to confine the flow of molten alloys to the limited area upon which the weld is to be applied. The compound protects the parent metal from discoloration at welding temperatures and thus assists in retaining the cleanliness and brightness of the metal.

Eutectic Welding Alloys Corporation, 40 Worth Street, New York 13, N. Y.

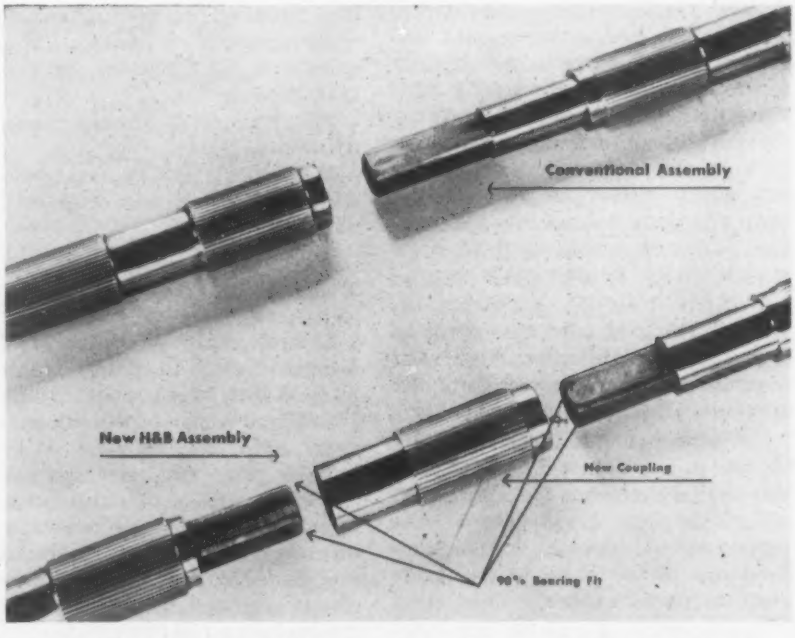
For additional data, request item K-190, using business reply card on page 205, and specify product.

Alrose Developments

The "Definized G" process is based on the use of glyoxal in conjunction with a catalyst plus inhibitor mixture which brings about shrinkage control without excessive tendering and yellowing. The new process is said to make possible the stabilization of cotton fabrics, as well as rayon and acetate fabrics by an aldehyde process. In this process, the glyoxal and catalysts are dissolved and applied on a padder and the fabric is dried and baked a few minutes at elevated temperature. The fabric is then washed, dried, and framed to predetermined finished width.

The "Protonized" process was developed for imparting shrinkage resistance to wool without impairing its hand, strength, or resiliency. It is a controlled wet-chlorination process in which variations in prior treatment of the wool and in rate of chlorination are equalized by a special pre-treatment. Processing equipment for application of the Protonized

New Coupling for Spinning Roll Sections



A coupling was recently designed to achieve a better fit between spinning roll sections and thus assure accurate and true alignment of the complete drawing or feed roll. With this new precision-made coupling, the fit is said to be perfect. A further advantage cited for this coupling is that it permits complete interchange of parts. H & B American Machine Co., Pawtucket, R. I. For additional data, request item K-263, using business reply card on page 205.

process must be of acid-resistant and chlorine-resistant construction.

Alroterge TA is a specially formulated detergent for woolen goods. According to the manufacturer, excellent results are obtained by using 1 to 1.5 pounds of Alroterge TA plus 1.5 to 2.0 pounds of soda ash per hundred pounds of wool at 100 to 130 degrees F in a 10 to 15-minute wash cycle. For dyed goods, the soda ash may be reduced or mitted to eliminate the danger of color bleeding. This detergent is available as a viscous amber liquid, readily soluble in water with a very slightly alkaline pH.

Nonisol 210 is primarily an emulsifier and spreading agent. Its penetrating action as measured by the Draves' test is only moderate. Detergent action as measured by carbon soil removal is only fair, but being a powerful emulsifier, it is highly effective in operations involving removal of mineral oil and grease, particularly in solvent and emulsion cleaning.

Altroterge S is an alkyl aryl sulfonate wetting agent and detergent. It is soluble in water to the extent of three per cent at 20 degrees C. This agent produces a copious and stable foam at low concentrations. The optimum temperature for foam formation is in the 40 to 60-degree range.

Alrowet is a secondary C-12 alcohol sulfate non-foaming wetting agent for 3 to 15 per cent electrolyte. It is used in bleaching, pickling, carbonizing, and alkali cleaners.

Alrose Chemical Company, Providence 1, Rhode Island.

For additional data, request item K-191, using business reply card on page 205, and specify product.

"Schollerized" Process for Wool Shrinkage Control

A new chemical process for wool shrinkage control is known as "Schollerized." It is claimed that garments that are knitted or woven from wool and treated by this process require no particular care in washing. It is explained however, that because of the nature of the fabric, blocking to shape is advisable to maintain its like-new appearance. Complete elimination of matting and felting are claimed.

According to an announcement, the process permanently "dekinks" the tiny prong-like wool fibers which, when washed, would ordinarily become interlocked, causing subsequent matting or felting.

"Schollerized" wool is unaffected by rubbing or tubbing, it is claimed. The same properties that control the shrinkage also make it difficult for dirt to successfully cling to wool. The elimination of felted dirt-traps in the wool fiber strand permits ordinary soap and water to do a better cleaning job. Fast colors stay bright and the whole garment retains its new-like appearance for the life of the fabric, according to the manufacturer.

Scholler Bros., Inc., Collins & Westmoreland Sts., Philadelphia 34, Pa.

For additional data, request item K-192, using business reply card on page 205.

Swiss Harness Frames

The "Grob" harness frames and heddles, as imported from Switzerland, are now on the market in this country. The frames feature aluminum top and bottom shafts, continuous sliding studs, sliding outside hooks or eyes that can be placed in any position, sliding center brace, and lignostone end braces which are not affected by humidity.

Ball bearing top rolls for spinning and roving are marketed under the tradename Climax. It is claimed that these rolls improve yarn quality, reduce ends down, reduce cleaning and picking, eliminate oiling and greasing, and eliminate cap bar and saddle wear.

Watson & Desmond, P. O. Box 1954, Charlotte, N. C.

For additional data, request item K-193, using business reply card on page 205, and specify equipment.

Magnetic Tension Device for Winding Machines

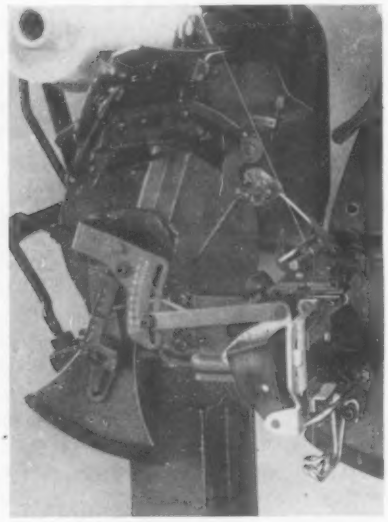
A new pinch-type tension device for winding normal twist synthetic yarns has been developed. This device is called the Magnetension because of its fundamental use of magnetism to provide the degree of tension applied when winding yarn.

This tension is easily attached to the No. 50 winding machine in the location of the present tension.

The principle by which tension is applied to the yarn is a loosely mounted magnetically attracted tension leaf pressed against a non-magnetic wear plate by the attraction of a small permanent magnet placed on

Cotton Clamp for Fork Trucks

A cotton clamp designed to handle gin, compress, and high-density cotton bales has been developed for use with gas and/or electric fork trucks. It permits mechanized warehousing as well as mechanized loading and unloading of rail cars and highway trucks. A simple hydraulic control valve actuates the clamp arms. Clark Equipment Co., Clark Tructractor Division, Battle Creek, Mich. For additional data, request item K-267, using business reply card on page 205.



The Magnetension (Universal).

the back side of the wear plate. The initial tension settings are readily provided by movement of the permanent magnet toward and away from the wear plate. Finishing tensions are determined by the settings of the lever attached to the traverse frame counterweight.

Some of the advantages of the Magnetension are summarized as follows :

1. The non-multiplying characteristics of this straight thread line pinch-type tension results in fewer shiners and broken filaments, and lower end breakage, increasing the amount of yarn run off from the cake delivery.

2. Smoothness and evenness of tension is achieved through the use of the low inertia, loosely mounted, magnetically attracted, tension leaf.

3. Untensionized yarn resulting from plucks in the supply causing cut ends and loops at the cones are eliminated since the yarn is constantly controlled.

Universal Winding Co., Providence 1, R. I.

For additional data, request item K-170, using business reply card on page 205.

Counters for Wool Processing Machinery

Especially useful on carpet looms, gill boxes, etc., is the recently announced Reset Magnetic Counter, Series 1205 (for a-c current only) and Series 1248 (for d-c current only). The device features a direct reading line of six large figures, in large windows, brought out boldly by a contrasting background of a band of light gray. In addition, high accuracy, fast operation, and more counts-per-minute are claimed.

Actuated through electromagnets, this counter can be connected in series with any device having a contact arrangement. Reset is standard. 1000 counts per minute is the maximum speed recommended.

Another counter adaptable to an unlimited range of use is the new mechanically operated Series 1260

Magnetic counter (Veeder-Root).

General Purpose Counter. It is available in four types: ratchet, rotary ratchet, direct drive, and revolution.

Veeder-Root, Inc., Hartford 2, Conn.

For additional data, request item K-171, using business reply card on page 205, and specify counter.

Gates Loom Accessories

A heavy duty lug strap with strength for use on the heaviest looms is in production. Designated Super Tex-Hide, the straps are designed to handle heavy woolen and worsted looms and the conditions sometimes encountered on the box side of silk, rayon, and even some cotton looms when the pick and pick motion is used.

Another new product is a harness strap made of Tex-Hide. These harness straps are said to possess qualities embracing flexibility with no continuous growth, a smooth, clean surface, no progressive tearing, no hook pullouts, and clean holes when punched.

A drop box picker made of Tex-Hide is a product said to have shock-absorbing characteristics that insure maximum life for the shuttle, stick, and the entire picking motion.

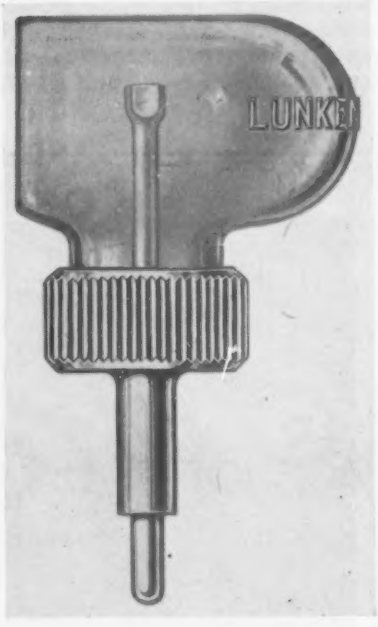
The Gates Rubber Company, Denver 17, Colorado.

For additional data, request item K-195, using business reply card on page 205, and specify product.

Lunkenheimer Products

Especially designed for tight quarters such as the center main bearings on looms, the "Flat Side Shallow Body Oiler" can be installed in about half the space usually required for a bottle oiler. Measuring 3⅜" in overall length, the oiler is just ¾" from center line to flat side. The new oiler, designated No. 2, Fig. 1816, features: automatic operation, feeding only when the shaft is in motion; visible oil supply; no oil wastage; ease of refilling; easy application.

Incorporating the application of full cylindrical body sections to bronze gate valves, the new Fig. 2228



Flat side oiler (Lunkenheimer).

is said to provide maximum distortion resistance. Fig. 2228 is a 200 lb. S.P. bronze, double disc, "Union Bonnet" gate valve with rising stem and screwed ends. A companion valve, Fig. 2229, is the flange end pattern, rated at 150 lb. S.P. These are made in sizes ¼"-3".

A new line of 150 lb. S.P. bronze gate valves includes 3 types: Fig. 2150, where the flexibility of the double disc valve is desired; Fig. 2151, for use where the solid disc is an advantage, as in food processing

plants and handling gummy substances; and Fig. 2153, a non-rising stem type for use where head room is restricted. All of the valves are equipped with patented alloy stems. The three types of valves are largely interchangeable. The same body is used in Figs. 2150, 2151, and 2153, requiring only an interchange of trimmings to convert from one type to another. Screw end valves are rated at 150 lbs. S.P.—300 lb. W.O.G.; flange end valves at 150 lb. S.P.—225 lb. W.O.G.

The Lunkenheimer Co., Cincinnati 14, Ohio.

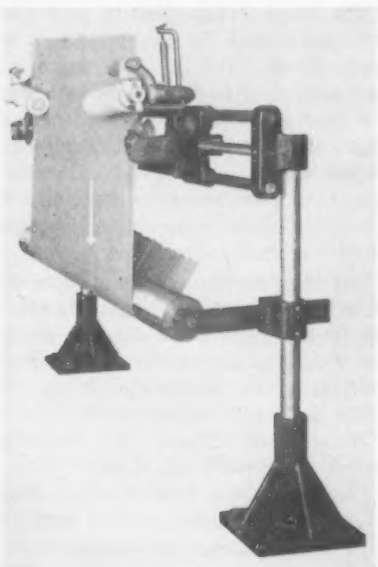
For additional data, request item K-138, using business reply card on page 205, and specify product.

Cloth Handling Equipment by Mount Hope

Cloth guiders designated Mount Hope Precision Guiders automatically control the lateral movement of cloth within close limits. According to the manufacturer, this precision control is made possible by a new principle in cloth guiding. A fluted selvage wheel, which is contacted and turned by the selvage, actuates a rack, which in turn actuates the tilting of the nip rolls to guide the cloth toward or away from them as required. The result is practically instantaneous reaction, and safe handling of goods.

The guiders are purely mechanical, requiring no coils nor valves to cause trouble. They have wide adaptability in use and type of goods they can handle. Stainless steel construction with neoprene nip rolls, make them rust-proof and capable of indefinite service, it is claimed.

Precision cloth guiders (Mt. Hope).

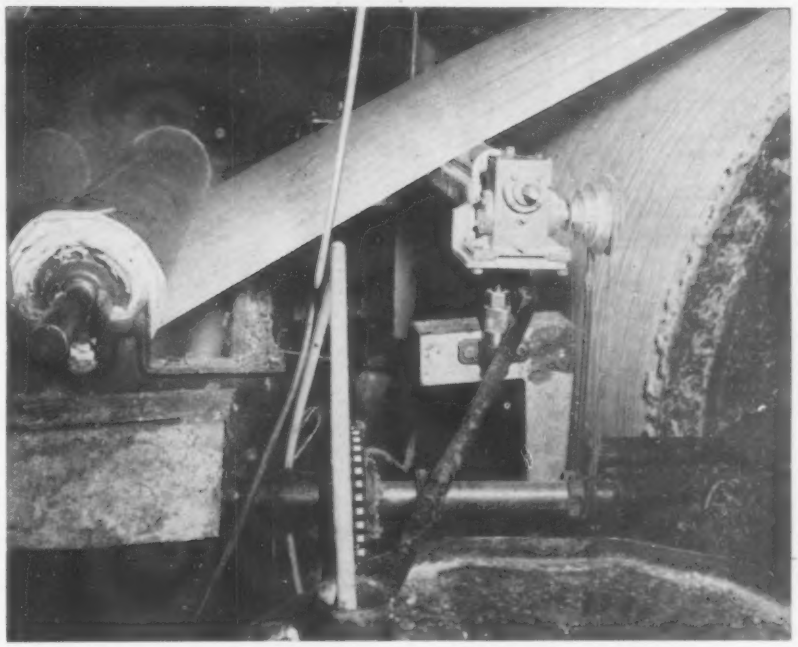


Another development is a device for removing the bow in goods. This unit is called the Mount Hope Bowed Weft Straightener. It consists of two 4" diameter brass ball-bearing guide rolls, over which cloth passes as it enters the device, and as it leaves the device. Between these two guide rolls are located two free-wheeling expanders geared together, and driven at a very low speed by a small electric motor, so that the mountings with their bowed axle can be oscillated in opposite directions.

The cloth travel, through the combination of the four rolls, can be made longer or shorter at the middle of the cloth and at the selvages, by oscillating the two expanders' mountings. For example, if the bow happens to be ahead in the middle of the cloth, the expanders are adjusted to provide a longer path of travel in the middle of the cloth width than at the selvages, thus causing the selvage to catch up with the middle.

Mount Hope Machinery Co., 42 Adams St., Taunton, Mass.

For additional data, request item K-142, using business reply card on page 205, and specify product.



Warp lubricator installation on slasher (Southern Sizing).

Warp Lubrication Product

A patented process for the separate application of warp lubricant has been developed.

In this process, a liquid warp lubricant material is applied separately from the starch film and at the outer edge of the individual warp ends. This action imparts surface lubrication to the shuttle and other loom parts effecting a marked reduction in both warp and filling stops, according to the manufacturer.

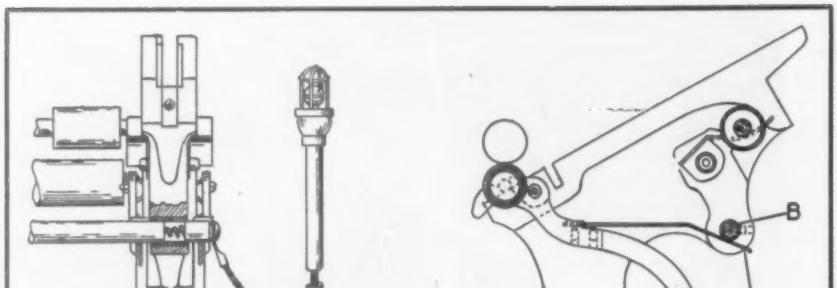
The warp lubricator unit can be adapted to any conventional slasher and is mounted between the size box and first drying cylinder. Lubricant material is pumped direct from the shipping drum into an aluminum trough; a metal roll revolving in the bath of lubricant material applies it to the yarn sheet; adjustable overflow controls at each end of the trough insure a proper level in the trough and provide for complete circulation throughout the system. All moving parts are driven by pulleys from the drive shaft of the slasher.

The percentage of lubricant material to be applied to the yarn sheet is controlled by the speed of the applicator roll and can be accurately and simply regulated.

Slix is the registered trade mark for the new type liquid warp lubricant designed for use with the warp lubricator unit. It has the added feature of being easily removed in the desizing operation because it is hot-water extractable, it is claimed.

Southern Sizing Co., P. O. Box 167, Atlanta, Ga.

For additional data, request item K-158, using business reply card on page 205.



The Early Jones electric stop motion for roving frames (Saco-Lowell). When the end comes down, it wraps around the underclearer and quickly depresses it sufficiently to bring the small wire (A) in contact with rod (B). When this contact takes place, current flows through relay which causes contact in slow starter to open and thus shut down frame.

Saco-Lowell Developments

New machinery has been designed for the spinning of worsted yarns. The system, as presently designed, will handle fiber up to 3½" to 4½" of a general grade of 64's wool, with the expectation of extending this range of fiber length up to 7" or 8".

The process consists of a lapwinder, breaker drawing, finisher drawing, one process of roving, spinning, and twisting. The lapwinder is used to prepare the top for the breaker drawing, and also to make a ball for the creel of the finisher drawing. This lapwinder is distinctive in having a positively driven creel suitable for handling balls and in the insertion of two pairs of drafting rolls behind the large calender rolls. Breaker and finisher drawing are mechanically identical and have specially designed drafting systems and a baller motion which packages the drawing sliver in the form of a ball.

The drafting system consists of four bottom rolls, with a high degree of fiber control attained by the special arrangement of the middle top roll contacting the third bottom roll, and held a few thousandths of an inch apart from the second bottom roll.

This theory of drafting is also carried out in the roving, the drafting system for roving being known as the FS-1. The unique development in the roving process is the installation of a special creel designed for the handling of balls, which can be accurately controlled to attain precise tension. The Z system of drafting is used on the spinning frame, with all the alterations being made to allow for the greater fiber length.

In addition to the aforementioned development, the Saco-Lowell vertical opener has been redesigned in the interest of saving floor space and promoting easier and better housekeeping in the opening room. The old cast iron square housing with its high clean outdoors, making removal of waste from the waste compartment difficult, has been replaced by a round steel construction. The cleanout doors are placed extremely low so that the waste removed from the good fiber can be taken away from within the machine by a long-handle rake. Cleaning of the entire machine is said to be much easier with this new design.

The gallows drive for driving the beater shaft has been substituted for by a straight flat belt drive, consisting of a motor mounted vertically on a base plate at the side of the machine, and driving the beater directly through a short flat belt.

The Early Jones electric stop motion, developed in conjunction with Early Jones of Bibb Manufacturing Company, has been designed to stop the roving frame whenever an end comes down. The mechanism is reported to be a definite aid to production, as it eliminates the necessity of the operator maintaining a constant watch for ends coming down.

The stop motion is actuated by an electric current which functions when the roving from a broken end forces the front underclearer down. This completes the circuit, stopping the frame and reducing waste.

Saco-Lowell Shops, 60 Batterymarch St., Boston 10, Mass.

For additional data, request item K-163, using business reply card on page 205, and specify equipment.

Drawing frames used in the Saco-Lowell system for manufacturing worsted yarn, are equipped with a balling attachment as shown here.

New IBM Machines

The electronic calculating punch is a commercial calculator engineered to perform problems of multiplication, division, cross-addition and cross-subtraction and to punch the results in cards at a high rate of speed. The machine performs all calculations electronically and checks calculations simultaneously with multiplying or dividing. It multiplies individual amounts by individual multipliers and divides individual amounts by individual divisors. It also multiplies a group of amounts by a common multiplier and divides a group of amounts by a common divisor. Because of its programming facilities, storage facilities and the complete flexibility of the control panel, this machine can be readily adapted to all types of problems.

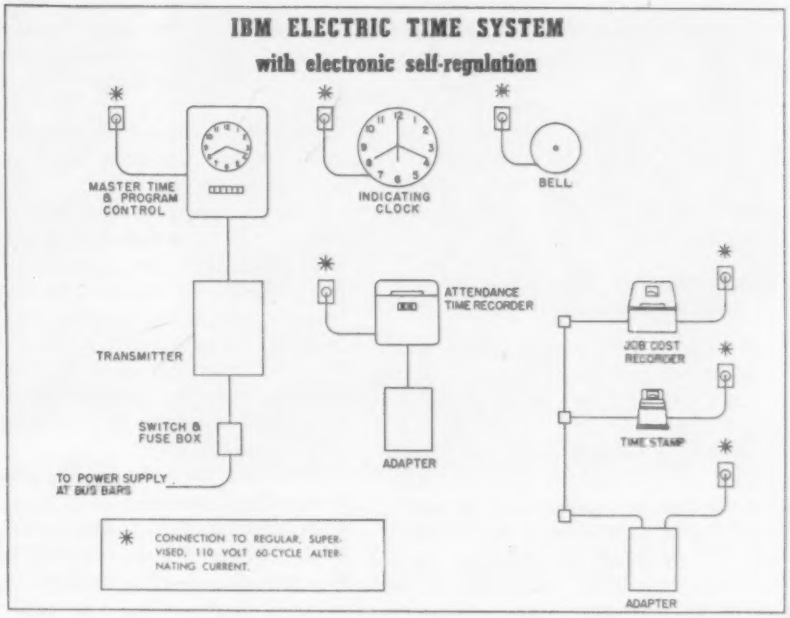
The outstanding feature of a new high speed sorter, used for arranging and selecting punched cards, is a substantial increase in its speed of operation. As in the previous model, the card supply may be replenished without stopping the machine, there is an automatic runout which finishes sorting the cards left in the machine when the card hopper becomes empty, and cards with specified numbers in a column can be segregated while the remaining cards are deposited in a reject pocket without disturbing their sequence.

The new electric time system with electronic self-regulation requires no special clock wiring, operating from the regular supervised 60-cycle commercially supplied alternating current. Synchronous motor clocks are self-regulated individually and reset automatically to system time should there be current interruptions. This system also provides for the automatic sounding of time signals and, through an adapter unit, for the operation of minute impulse equipment such as attendance time recorders, job cost recorders and time stamps.

The high speed electric punched card accounting machine with three-line listing brings new beauty of design to business machines. It is faster, more flexible, and has a new tape-controlled carriage which spaces automatically for filling in printed forms. It prints three lines of information from one card, and can also list, cross-add or cross-subtract several amounts simultaneously from one card.

International Business Machines Corp., 590 Madison Ave., New York 22, N. Y.

For additional data, request item K-128, using business reply card on page 205, and specify product.



Moisture Register

A pressurized moisture register, designed to accurately test moisture content of loose and compressible materials used in the textile industry, has been made. This instrument is now being specifically used on scoured wool, combed wool (tops), wool yarns (skeins), wool blankets, and bulk cotton, according to the manufacturer.

Identified as Moisture Register Model PD-1, it is an electronic moisture meter. Through deep penetration by high frequency field it tends to average moisture content of material to a depth of three inches. Constantly duplicable readings are reported to be obtained by incorporation of coil spring tension on the electrode of the instrument. At predetermined pressure point, microswitch is activated. Signal is accomplished by lighting the meter dial. Further pressure opens the illuminating circuit. Readings must be taken when meter dial is lighted for accurate instrument results.

Calibrations are available for wool mentioned. Numerical dial scale enables operators to establish their

Moisture Register, Model PD-1, tests moisture content of textile fibers.

own calibrations for other materials using standard oven tests as a basis of comparison. Average range of moisture covered is zero to 15%, wet weight basis.

Moisture Register Co., 133 N. Garfield Ave., Alhambra, Calif.

For additional data, request item K-145, using business reply card on page 205.

High-Speed Dryer for Slashers

A high-speed dry box for slashers, capable of processing at least 1,000 pounds of yarn per hour, has been developed.

Drying is accomplished by passing heated air through the yarn, exhausting the moisture-laden air and, at the same time, introducing fresh, clean air to continue the drying cycle. Seventy to eighty per cent of the air is re-heated and re-used to decrease the amount of steam needed to attain drying temperatures.

The yarns passing through the unit are never exposed to direct blasts of hot air. Special nozzles have been designed which reduce the air velocity generated at the fans and distribute it in a soft, even pattern over and through the entire yarn sheet. Only 14 yards of yarn are inside the slasher at any one time, but the heated air, circulated within the box at a rate of 30 times per minute, dries the yarn without fiber disturbance of any kind, it is claimed.

The low air velocities used in the new dry box permit the air to remain in contact with the yarn a longer time, thereby removing more water with each cubic foot of air presented. The low velocities seep through the yarn sheet better and have no tendency to bounce off and dissipate out the sides of the yarn sheet.

Completely insulated, heat loss outside the box has been reduced to a negligible amount.

The operation of the dry box is simple. It is completely automatic. The interior of the unit cools from 260 degrees to about 130 degrees, seconds after the operator stops the slasher. This prevents yarn damage from too-long exposure to high temperatures and permits the operator to go inside the box immediately after stopping it.

From the time the yarn enters the box until it emerges, it is in contact with moving metal parts only two times. There is no possibility for size transfer of yarn disturbance because of sticky rolls, it is said.

The drying unit is designed to be used with the front and back ends of slashers now in operation. It is 16 feet long, 10 feet wide and 11 feet and 8 inches high.

Bachmann - Uxbridge Worsted Corp., Uxbridge, Mass.

For additional data, request item K-223, using business reply card on page 205.

Improved Spindle Lubricants

Improved spindle lubricants that are reported to cut bolster wear as much as two-thirds have been made available to the textile industry.

The new oils, which bear the names of Lily White Oils AX, BX and CX, have improved oiliness value and stability in usage, according to the manufacturer.

Sinclair Refining Co., 630 Fifth Ave., New York 20, N. Y.

For additional data, request item K-165, using business reply card on page 205.

New Chemical Resin Coating

New brilliance and gloss for vinyl film, sheeting and coated goods is now made possible by a clear topping recently developed.

This chemical resin coating is said to be free of any tendency to craze or burnish and has the added advantage of lessening the residual tack inherent in plasticized vinyl compositions, and yet in the course of application, it becomes an integral part of the substrata.

Designed to meet a wide variety of production requirements, this clear topping may be applied by hand or machine methods — can be air brushed, knife spread or roller coated.

Interchemical Corporation, Finishes Division, 350 Fifth Ave., New York 1, N. Y.

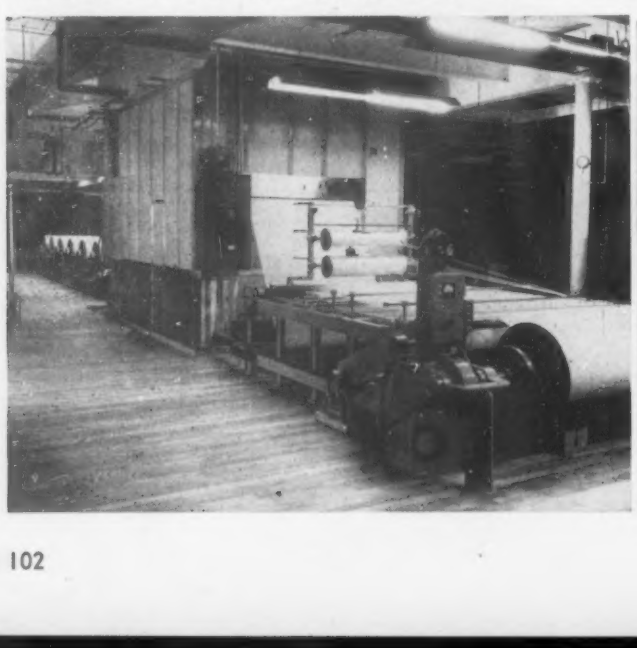
For additional data, request item K-196, using business reply card on page 205.

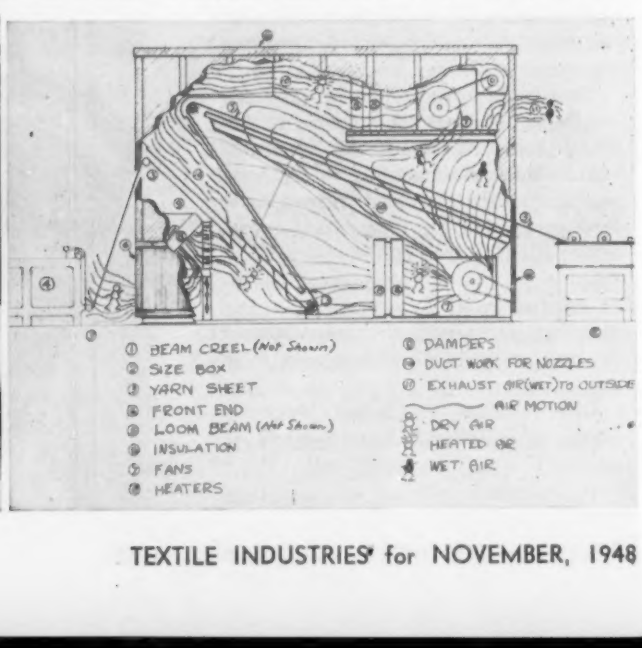
Floor Mat Reduces Hard Floor Fatigue and Slippery-Floor Hazards

Corrugated mats made of especially compounded rubber links woven on 12 gauge spring steel wire provide sure, comfortable footing to stop slipping accidents and reduce worker fatigue.

Akro-Mats are particularly adapted for use where moisture, oils, animal fats, acids, chemicals, solvents

Left, view of Uxbridge's high speed dryer for slashers. Right, schematic diagram showing principle of operation.





Photos of results of test made to show efficiency of water treated with a penetrant designed to improve its effectiveness in fighting fires. Both bales were burned for three hours. Then 399 gallons of plain water were applied to this bale. When this photo was made on the following day, the bale was still burning.

13 gallons of "Unox" treated water were applied to this bale and fire was extinguished as shown in this photo which was also made on the following day. (Carbide and Carbon Chemicals Corp.)

and abrasives are apt to be on the floor as the rubber resists deterioration. They are easy to clean and easy to handle, lay flat or roll up.

Akro-Mats are available in any desired length and in widths up to 48 inches.

General Scientific Equipment Co., 2700 W. Huntingdon St., Philadelphia 32, Pa.

For additional data, request item K-241, using business reply card on page 205.

Textile Chemicals by Carbide and Carbon

"Unox" brand penetrant is a special chemical mixture made exclusively to improve the efficiency of water for fire-fighting. According to the manufacturer, one per cent of the penetrant in water greatly increases the ability of water to wet large surface areas and especially to penetrate porous materials. These two features mean that fires in wood buildings, flock, baled cotton, and other solid combustible materials can be extinguished quickly, with little smoke, and with a minimum of water and water damage. This penetrant contains a special chemical inhibitor against corrosion, hence does not increase the corrosive action of water on any metals except unpainted galvanized iron. Water containing the recommended amount of penetrant will not injure textile materials, it is claimed.

Diisobutyl carbinol is an anti-foam agent for textile printing and dye baths. It has a pronounced and persistent defoaming action on aqueous systems when present in minute percentages. Small quantities are also effective for coupling water into oils and other water insoluble materials in the manufacture of textile auxiliaries. This high-boiling water-white, nine-carbon alcohol is only slightly soluble in water, but is miscible with most organic liquids. With water it forms a heterogeneous constant-boiling mixture, which contains 29.6 per cent by weight of the alcohol and boils at 98.5°C.

Polypropylene glycols 425, 1025, and 2025 are useful as lubricants for textile fibers; as coupling agents for soluble oil compositions; as humectants for dye pastes; as plasticizers and humectants for sizing compounds; and as intermediates in the preparation of synthetic detergents and surface active compounds. They are high-boiling, viscous liquids, possessing complete solubility in benzene or heptane. Polypropylene glycol 425 is water soluble, although the higher two members of the series exhibit slight solubility.

Carbide and Carbon Chemicals Corp., 30 East 42nd St., New York 17, N. Y.

For additional data, request item K-113, using business reply card on page 205, and specify product.

Fiber Fineness Gauge

An industrial model air gauge has been developed for measuring textile fiber fineness. The instrument measures fiber fineness by determining the air porosity which is used as an index.

Air is drawn through a plug of fibers, and the resistance to flow of air is measured. Fine fibered stock offers more numerous air passages, but the average openings between the fibers are smaller, thus the resistance offered to the flow of air is geometrically greater than coarser stock. Evaluating the resistance to the flow of air, or conversely, porosity indirectly measures the degree of fiber fineness.

When the instrument is used as an air gauge, the rate of flow depends upon the differential in area between the gauging head and the part being measured. A metal float is buoyed in a tapered glass tube until the area between the float and walls of the tube are proportional to the escape area. This automatically rectifies the scale to a linear graduation of diameter difference.

The Sheffield Corp., Springfield & Thomas St., Dayton 1, Ohio.

For additional data, request item K-209, using business reply card on page 205.

Bobbin Painting Machine

A machine for painting both bobbin tips and bases is in use. The production of the bobbin painting machine is said to be 10,000 bobbins per day of eight hours. One person can run the machine, and the amount of paint applied to the tip of each bobbin is said to be uniform.

The machine consists of a cylindrical plate about one-half inch thick on which the other parts are attached. An electric motor drives the pulley on the outer edge. The amount of

paint applied to the bobbins can be altered by adjusting the air pressure by means of a screw provided for the purpose. The bobbins are driven at 800 rpm while the painter is in operation. A hand rest close to the spindle is provided to start the painter, and a cam operates to bring the brush in contact with the revolving bobbin for sufficient time for the bobbin tip to be painted.

D. A. Jolley Co., Kannapolis, N. C.

For additional data, request item K-210, using business reply card on page 205.

Wrinkle Resistance Tester

A unique device which permits the accurate determination of wrinkle resistance in woven fabrics has been manufactured. Called the wrinkle recovery tester, the device is said to open up opportunities for new fabric construction by providing more accurate measurement data on wrinkling characteristics of woolens, worsteds, cottons, and rayons.

In testing, one end of the creased fabric sample is inserted in a jaw which holds it securely. The other end hangs free and is brought in line with a vertical line on the meter. The degree which the free end "bounces back" after a few minutes' suspension is then measured on the meter to show the actual amount of recovery.

With the new device, the differential in various fabric weights can be corrected, according to the announcement.

Monsanto Chemical Company, 140 Federal Street, Boston 10, Mass.

For additional data, request item K-211, using business reply card on page 205.

Cloth Inspection Machines Developed by Hermas

The Model IF inspecting and folding machine is designed especially for woolens. It is available in all standard widths. The examining table, from front to back or from top to bottom, is 72 inches. The speed of the cloth is variable. The machine may be operated by foot control or remote control. With remote control the operator can stand several feet from the machine and control it by a small switch held in the hand. The cloth is taken from a truck, run over the table, down in front of the operator, and then back to the folding attachment and laid in folds on a table if the pieces are separated at the seams and taken away in single pieces. The table on the back of the machine is mounted on hinges and can be dropped out of the way, permitting a truck to be rolled in place and the entire load from the one truck run through the machine, and transferred to another truck when it is desirable to examine the entire load without separating the pieces.

The Model SR sewing and rolling machine is equipped with a roller cradle let-off and a double roll surface wind take-up. This machine produces a hard, uniformly wound roll at high speed. Large rolls are made by sewing the ends of individual pieces together on the railway sewing machine furnished. The sewing head used in the sewing machine unit was especially designed for this purpose.

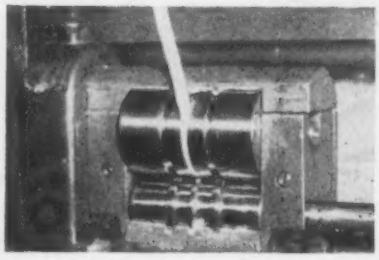
The Model IMW was designed especially for examining large rolls of cloth, where the entire roll of goods can be run through the machine at once. This machine can accommodate rolls up to 36" in diameter, and can be adjusted to take larger rolls. It is available with a vertical fluorescent box to enable the operator to look through the cloth and discover defects that would not otherwise be detected.

The Hermas Machine Co., Hawthorne, N. J.

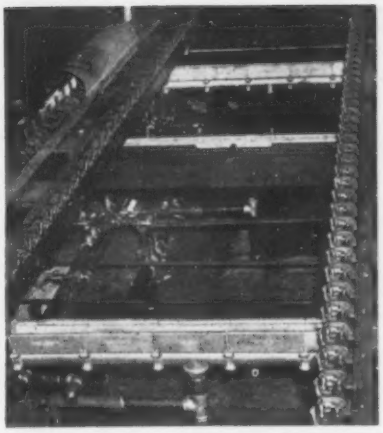
For additional data, request item K-130, using business reply card on page 205, and specify machine.

The Model IMW cloth inspection machine (Hermas).

Grooved Calender Rolls for Cards



Grooved calender rolls for cards are reported to permit placing more sliver in the can without damage to the sliver or the card. Other advantages cited by the manufacturer are savings on bearing maintenance costs and power required to run the card. Atlanta Machine Works, 98 Piedmont Ave., S. E., Atlanta, Ga. For additional data, request item K-268.



Tenter frame equipped with gas-burning infra-red generators (Process Heating).

Gas-Burning Infra-Red Generators

A new gas infra-red generator has been developed that burns with flameless, practically 100% combustion. The burner is made up of special cast iron segments, up to 12 feet in length in inch increments.

A scientifically designed port permits the burning of manufactured, natural, propane, butane, mixed, or vaporfied gas against a ceramic which becomes incandescent generating infra-red rays and convected heat or hot air.

It has a high heat release. According to the manufacturer, the system has stepped up production in the textile field from 100% to 200% under tenter frames, 100% on slashers, 100% or better when used as boosters on steam cans, and about 250% on singers. Further, it will cure material with speeds of 60 yards per minute on four color roller printing, it is claimed.

Process Heating Co., Inc., 346 Warren St., Brooklyn 2, N. Y.

For additional data, request item K-154, using business reply card on page 205.

System for Centrifugal Spinning of Woolen, Worsted, Cotton Yarns

Information was recently received to the effect that the centrifugal spinning of dry yarns such as woolen, worsted, cotton, and silk, is now possible due to the invention by Prince-Smith & Stells, Ltd., Keighley, England, of the P.S.C. (Prince-Smith Centrifugal) system.

The fundamental principle of the system is the ability to remove the dry spun yarn from the container in a usable form of package. Advantages claimed for the system include: Higher speeds; larger packages; less end breakage; no piecing-up required; a stationary bobbin; power driven and semi-automatic doffing; no "ballooning," "bobbin drag" or travelers; less labor required for operation; less floor space per pound of yarn produced; spins with a lighter drag and less twist; runs through lunch periods and overtime without attention.

The system includes not only spinning machinery, but also twisting and drawing machinery.

According to the announcement, all qualities, counts, and types of yarn may be produced upon the one spinning frame. The end is passed through the roller drafting zone, through the traversing tube to the inside of the spinning container, into which it is wound (with a light drag) by means of centrifugal force. The build within the container is actuated by the usual heart cam, which is reproduced when the yarn is transferred to the stationary bobbin. Twist is inserted as the yarn is rotated

Method for centrifugal spinning of dry yarns (Prince, Smith & Stells).

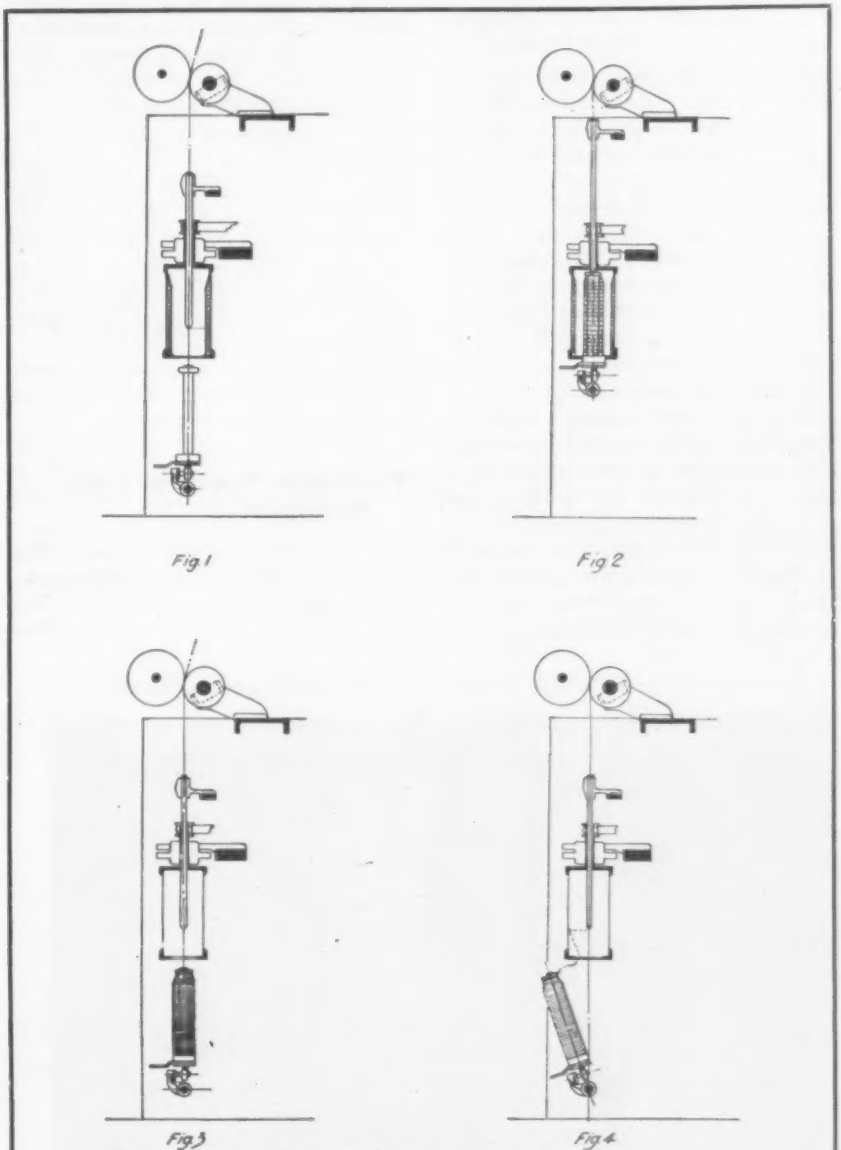


Fig. 1. Container is being filled with yarn. Empty bobbin is ready for elevation to receive yarn when doffing.
Fig. 2. Yarn is transferred from container to bobbin.
Fig. 3. Position when bobbins are filled and lowered. Note yarn stretching from nip to supplementary length of yarn above bobbin.
Fig. 4. Bobbin tilted, supplementary length of yarn trapped at base of container, broken away from full bobbin, and spinning again in process.

upon its own axis by the revolving spinner container.

Doffing can be initiated at will by pressing a button. It can also be set into motion automatically by the electrical length indicator, failure of electric power, or in the event of tape breakage. The latter two precautions are provided to prevent loss of yarn in the containers at the time the failures occur.

The doffing operation, which includes transferring of the yarn from container to bobbin, is power operated and semi-automatic, the movements being as follows: Elevation of empty bobbins to correct position within containers, with simultaneous elevation of the traverse tubes; instantaneous stoppage of front and other rollers; interception of the threads; winding of a supplementary length of yarn on to the special bobbin tops (this yarn being later released as the bobbins are lowered); rewinding the bulk of yarn from containers to bobbins. All these operations are automatic and function in 1, 2, 3 order, whether or not anyone is present. The side is then ready for doffing to be completed and spinning to start again.

Two levers are manually operated; one causes filled bobbins to be lowered by power to the rest position, the other tilts the full bobbins forward, which action severs the threads from the full bobbins and starts up the rollers. During the period after yarn has been transferred from the container to the bobbins and until the bobbins are lowered and tilted forward, the ends, having lost contact with the containers, are no longer being twisted, but remain stationary in a path from the nip of the front rollers to the filled bobbins. They are therefore unaffected by the continued operation of the containers. One side can be doffed while the other continues spinning. The actual time of the doffing operations is about 10 seconds, but the time taken in transferring the yarn from the containers to the bobbins is about two minutes, depending upon the counts.

The design of the P.S.C. twisting and roving machines is a duplicate of the spinning machine below the roller nip, with the exception of the pitch and size of the containers.

It is emphasized by Prince-Smith & Stells, Ltd., that this is a progress report on the P. S. C. system. The machinery is not yet on the market. Additional information will be issued at a later date.

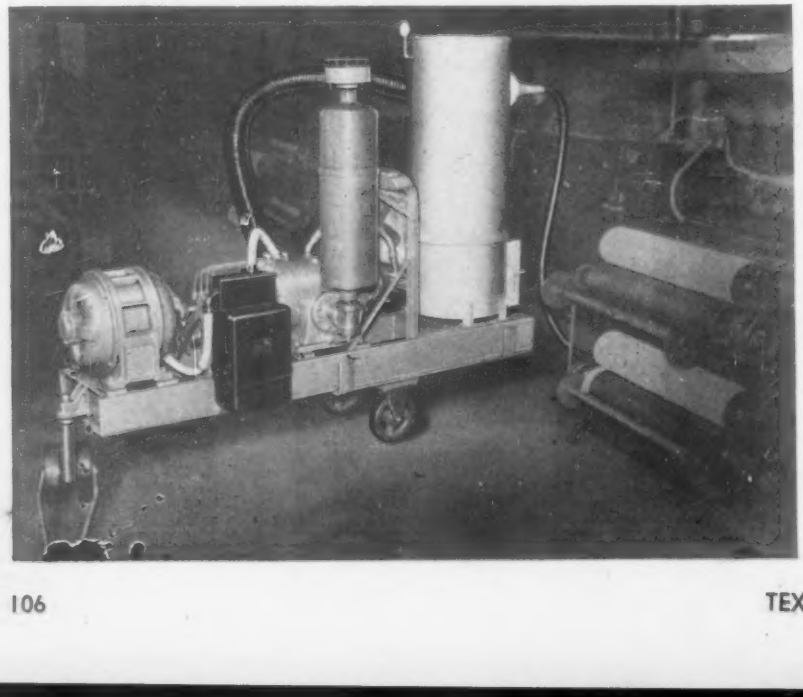
Atkinson, Haserick & Co., 211 Congress St., Boston, Mass., sole agents for Prince-Smith & Stells Ltd.

For additional data, request item K-205, using business reply card on page 205.

Portable Vacuum Card Stripper

A portable machine for stripping woolen, worsted, cotton, asbestos and waste by vacuum is available. The machine is mounted on an all-welded steel dolly with roller bearing wheels. According to the manufacturer, service tests have demonstrated that this stripper can efficiently handle up to 15 sets of cards. Two operators are required and stripping time is said to be reduced by two-thirds.

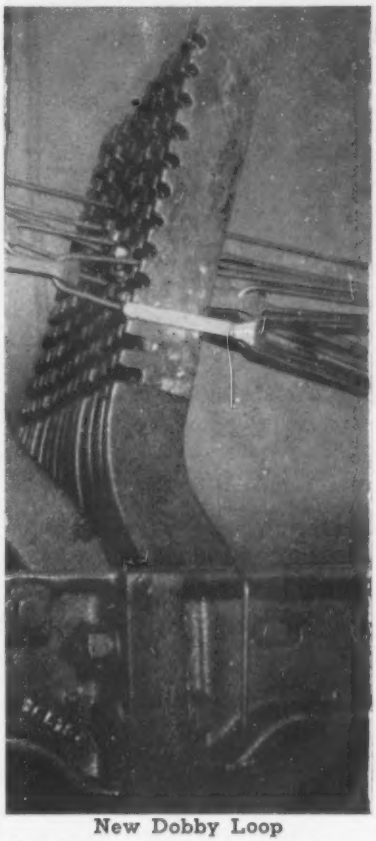
Portable card stripper (New England Machine).



The stripper measures 10 feet in length, 32 inches in width, and 6½ feet in height. It consists of a 30 hp motor which can be supplied for 220, 440, or 550 volts; a metal collector tank, vacuum pump and automobile type cooling and lubricating systems.

The New England Machine Works, 574 East Main St., Waterbury 16, Conn.

For additional data, request item K-152, using business reply card on page 205.

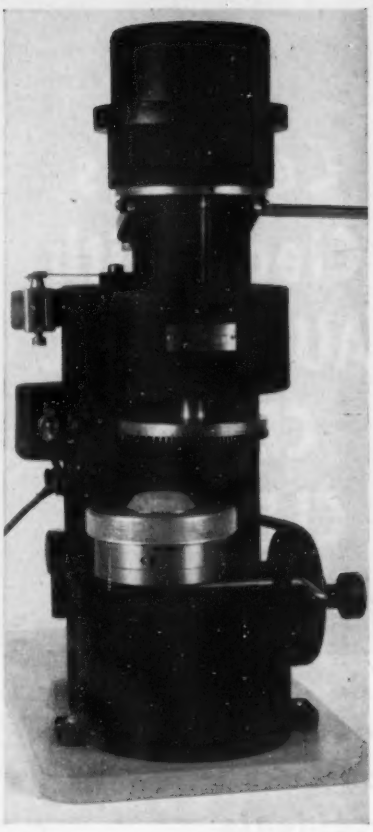


New Dobby Loop

The dobby loop shown here has a small roller (or sleeve) for the pivot, thereby eliminating wear in the slots on the jack. The roller turns when the jack moves. The loop is made of steel. W. D. Dodenhoff Co., 619 Rutherford St., Greenville, S. C. For additional data, request item K-276.

Ramie Packing for Pumps

Ramie is now being produced as packing for reciprocating pumps. It is recommended for such uses as cold water and brine pumps because of its high tensile strength and abili-



Schiefer abrasion tester (Frazier).

ty to absorb and retain lubricants, minimize abrasion and prolong wear.

Ramie packing is available square plaited, in coil form and in sizes of one-quarter inch thickness and larger.

United States Rubber Co., 1230 Avenue of the Americas, New York, N. Y.

For additional data, request item K-240, using business reply card on page 205.

Schiefer Abrasion Tester

The Schiefer abrasion tester is said to produce uniform abrasion over a plane area of a specimen from every azimuthal direction. It is based upon the mathematical solution recently worked out by Dr. Herbert F. Schiefer, physicist at the National Bureau of Standards, to obtain uniformity of wear, excluding any preferential direction. It is reported that the advantages and applications of this machine to research and testing are many, for the machine realizes perfectly determined constant conditions and will therefore lead to comparable results.

Fabric series can be tested to obtain optimum resistance to abrasions, it is said. Similarly, the effects of different laundering methods and detergents on the resistance to wear of fabrics can be evaluated.

For maximum utility the new machine can be provided with interchangeable parts. Different abradants can be used and specimens of different products can be held for the test. The specimen and specimen holder are readily removable and replaceable to permit quantitative measurements of the amount of abrasion at stated intervals during the test. The rate of abrasion from beginning to termination of a test and a numerical abrasive resistance index can be obtained from these measurements.

The size of the specimen to be tested, the tension on the specimen, and the pressure between the specimen and the abradant can be varied as specified.

Sherman W. Frazier, 953 Fifteenth St., S. E., Washington 3, D. C.

For additional data, request item K-219, using business reply card on page 205.

Static Eliminating Equipment for Textile Processing

An electronic instrument was recently introduced which is reported to be completely effective against static electricity, regardless of speeds, types of yarn being processed, or how intense static conditions are.

A high-voltage transformer, cable, ground cable, and eliminator bars make up the equipment normally employed. The bars are available in effective lengths from 1½ to 108 inches.

Features claimed for the apparatus are great flexibility and complete safety from the standpoint of operating personnel in that they can receive no shock from this equipment.

Applications recommended by the manufacturer include slashers, cards, looms, twisters, spinning frames, tenter frames, shearers, knitting machines, and warpers.

Takk Corporation, Newark, Ohio.

For additional data, request item K-168, using business reply card on page 205.

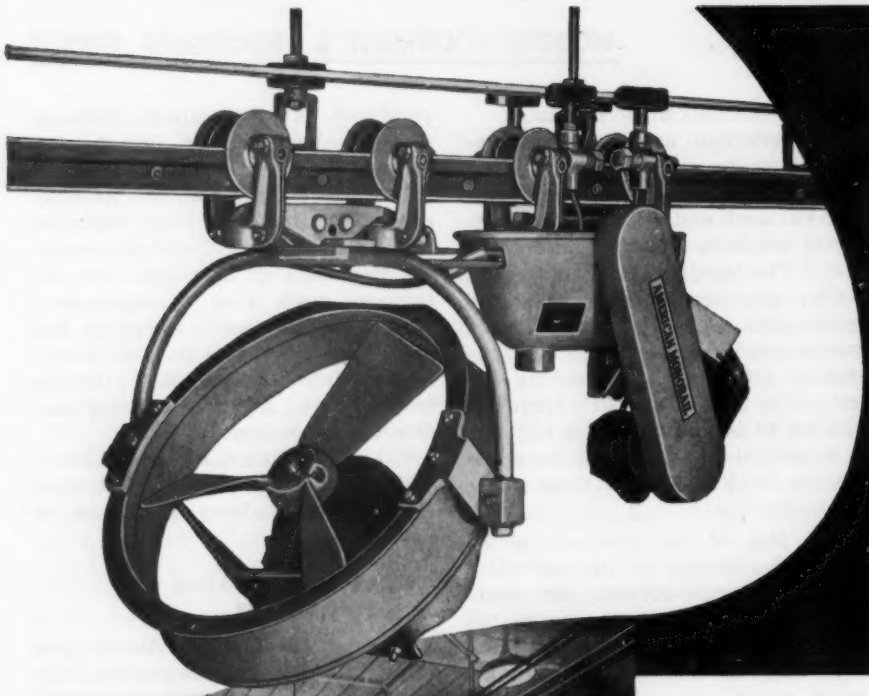
Improved Tinting Compounds

A modified form of viscous-type tinting compound is represented by the "Minotints," now available in 14 shades. Minotints have been formulated to offer increased degrees of self-detergency and fiber conditioning.

According to the manufacturer, the versatility of this line of identification mediums has been demonstrated on all fibers by application in the concentrated form where additional moisture is not desired, and by use in diluted form. In the latter case it is only necessary to add the Minotints to any required quantity of water.

Excellent compatibility with many types of solutions, emulsions, pastes, and soaking compounds has been evi-

Electronic type static eliminator installation on beamer (Takk).



Keep Ceilings Clean with AUTOMATIC CEILING CLEANERS

No Labor Cost
No Production Loss
No Ladder Accidents
No Fire Hazard

At a recent meeting of textile executives, twenty-four mills reported most common practice of blowing down ceilings once every twenty-four hours with frames running, or once a week when idle. This means lost production when the machines are shut down under the cleaners or extra time for cleaning labor.

ONE MILL REPORTED EXCELLENT RESULTS WITH AUTOMATIC CLEANERS!

Our engineers can show you how a simple high-velocity traveling fan unit can eliminate your ceiling cleaning problem entirely. Systems have been operating well over a year without blow down.

Write for copy of Bulletin CB-3 describing all the latest developments in Automatic Cleaners for Textile Mills.

THE AMERICAN MONORAIL COMPANY

13106 ATHENS AVENUE **CLEVELAND 7, OHIO**

denced, it is claimed. Adequate identification is normally achieved by the application of three to four tenths of one per cent Minotint, based on the weight of the fibers, regardless of the technique or other materials employed in preparatory operations.

Borne Scrymser Company, 632 South Front Street, Elizabeth, N. J.

For additional data, request item K-106, using business reply card on page 205.

Portable Motor Driven Hydraulic Pump

A new portable, motor-driven hydraulic pump for conversion of hand-operated hydraulic systems to power operation, is on the market. The pump, known as the P-182, incorporates the motor, valve, pump and oil reservoir into one unit for simple quick installation and operation.

The pump will operate from 2 to 25 rams of various capacities. It triples ram speeds for greater plant output and faster maintenance work and is quickly adapted to any hydraulic system requiring up to 1000 psi.

General specifications are: height, 16"; dia. of base, 12¾"; weight, 75 lbs.; amount of oil required, 1 gallon; hose connection, ⅜" female pipe top.

Blackhawk Mfg. Co., Milwaukee 1, Wis.

For additional data, request item K-107, using business reply card on page 205.

Bench Grinder

A 6" standard bench grinder which is designed for "run of the shop" jobs is available. For convenient use it can be easily mounted on any work bench or bolted to a pedestal for spotting anywhere.

This grinder is powered by a ¼ hp constant speed motor which gives ample power for such jobs as cleaning and sharpening tools, removing rust, scale, old paint, etc.

The rotor and wheel spindle are mounted on full-size bearings with protective sleeves covering these bearings to keep out abrasive dust and dirt. Wheel guards are cast integral with motor housings for greater clearance, and provide ample room for use of wire wheel brushes. Sturdy full-size tool rests are locked in base grooves with wing nuts and adjustable to compensate for wheel wear.

The Black & Decker Mfg. Co., Towson 4, Md.

For additional data, request item K-108, using business reply card on page 205.

Midget psychrometer (Kearny).

Midget Psychrometer Determines Moisture Content

The KMC Midget Textile Psychrometer was designed for quick, practical moisture determinations. It is an electrical precision instrument, its principle being based on the resistance to electrical conductivity of the material to be tested. The measurement of resistance, which is an inverse function of the amount of moisture contained in a sample, is enlarged by a vacuum tube amplifier which makes the current value sufficiently large to be practically measured on a moving coil-type meter.

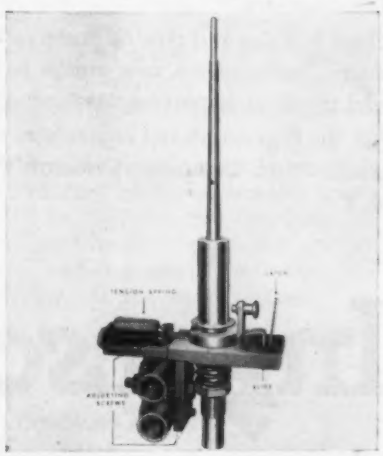
Since different materials have varying degrees of conductivity, individual charts are required for cotton, raw wool, dyed wool, rayon, paper and so forth. When standard charts are not available, it is comparatively simple to make an individual calibration for the material involved. This is done by first testing the sample with the psychrometer, the reading obtained being related to an oven test regain measurement determined on the same sample, the oven test weighting, of course, being initiated immediately after the psychrometer measurement. By repeating this procedure over the desired moisture regain range, a chart can be accurately calibrated.

It is recommended that several readings be taken on any sample since the distribution of moisture is not always entirely uniform. The average of these readings when converted to a moisture regain basis gives results within an accuracy of one-half of one per cent.

Kearny Manufacturing Co., Inc., Kearny, N. J.

For additional data, request item K-139, using business reply card on page 205.

Spindle bracket for throwing frames (Marquette).



Spindle Bracket for Throwing Frames

A unique spindle bracket for throwing frames consists of a slide which carries the spindle on a supporting bracket toward and away from the driving belt in a straight-line movement. A simple coil spring provides even tension in bringing slide and spindle into contact with the belt.

A latch is used for operation of the slide, disengaging the spindle and anchoring the slide and spindle in neutral position while bobbins are being doffed. Latch is easily released, whereupon the tension spring carries the slide forward so that spindle comes in contact with driving belt.

The bracket is designed for mounting on rail tubes or it can be supplied for mounting on flat rails.

It is reported that the bracket offers the throwster these advantages: Standard Marquette spindles can be used; less space for operation is required; larger bobbins can be used without interference from separators; spindles are easily plumbed and stay plumbed since bracket has no pins or bushings; spindle speed is uniform and accurate as a result of constant, even spring tension; there can be no slack twist; very little lubrication is required; no dirt or muss from over-oiling or vibration corrosion.

Marquette Metal Products Co., Cleveland 10, Ohio.

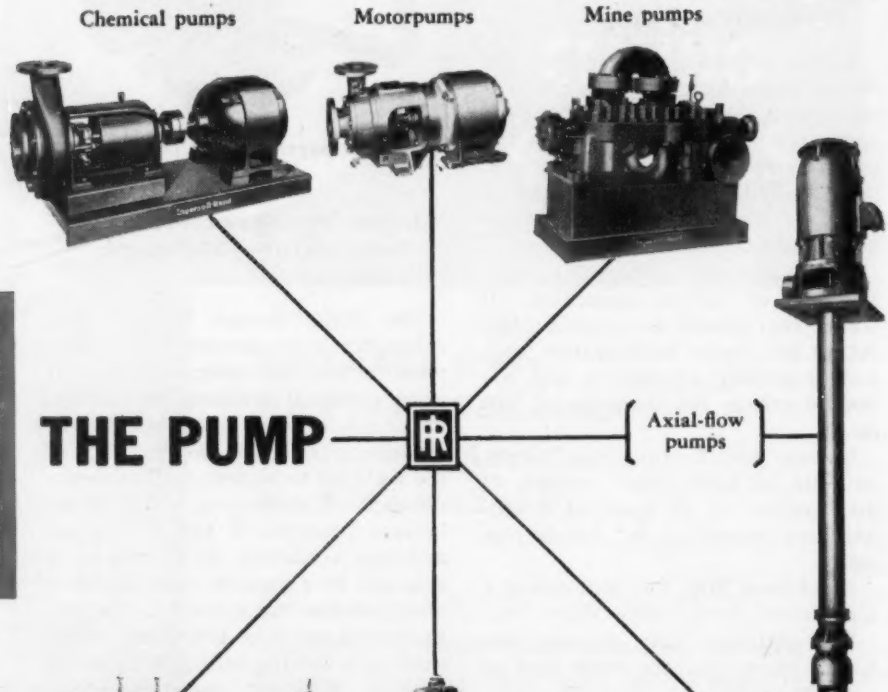
For additional data, request item K-141, using business reply card on page 205.

You specify

THE FLUID, TEMPERATURE, AND PRESSURE

We'll specify

THE PUMP



Ingersoll-Rand builds pumps to handle practically all liquids used by industry—fresh water, petroleum, salt water, paper stock, boiler-feed water, alkalis, acids, and many others.

There is a size and type of pump in this line to handle most any liquid-moving problem. Furthermore, new pumps have been developed as required to meet the special needs of important new industrial processes.

Ask the Ingersoll-Rand engineer to recommend pumps to meet your conditions. Ingersoll-Rand Company, Cameron Pump Division, 11 Broadway, New York 4, N. Y.

AIR TOOLS • ROCK DRILLS
COMPRESSORS • TURBO BLOWERS
CENTRIFUGAL PUMPS • CONDENSERS
OIL AND GAS ENGINES

Ingersoll-Rand

11 BROADWAY, NEW YORK 4, N. Y. 119-10

Air line filter (M-B Products).

Air Line Filter

An automatic filter has been developed for use in protecting from water, dirt, or scale, any equipment which is operated off an air line that is likely to contain contamination.

The sediment bowl is made of a transparent plastic. As a consequence the filtering element and foreign matter filtered from the air line are clearly visible, thus eliminating all guess work as to when the filtering element should be cleaned or when the bowl should be drained. The plastic material withstands temperatures up to 150 degrees and a burst test of 500 pounds.

The ribbon type filtering element functions on the edge filtration principle and positively removes solids 10 microns and larger, according to the manufacturer.

M-B Products, 130-134 E. Larned St., Detroit 26, Mich.

For additional data, request item K-147, using business reply card on page 205.

Aluminum Asbestos Roof Coating

An aluminum asbestos fiber roof coating has been placed on the market. The product, called Asbestolite, is said to act as a heat reflector in addition to providing protection against all weather hazards. According to the announcement, the material is particularly suitable for use on roofs of textile mills because of its ability to reduce heat inside the building.

The roof coating is made by suspending flakes of aluminum in an asphalt base. These flakes, overlapping like scales on a fish, are said to be equivalent to two protective coats. On corrugated metal roofs, 1½ gallons will cover 100 square feet, it is claimed.

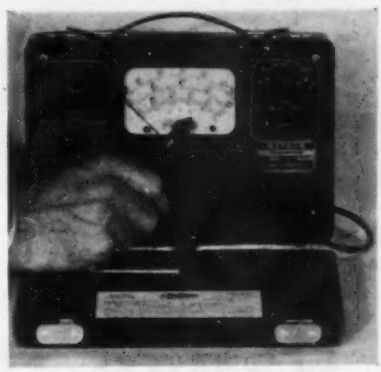
The Monroe Company, Inc., 10703 Quebec Avenue, Cleveland 6, Ohio.

For additional data, request item K-148, using business reply card on page 205.

Precision Tachometer

A new tool to measure speeds of rotation with extreme accuracy is now available for laboratory, test stand and general applications. The Precision Tachometer is reported to be accurate to ¼% of the speed being measured and is of the continuous indicating type, covering wide speed ranges.

Two types are available, identical except for speed ranges: Type 48H, for speeds of 900 to 10,000 rpm; and Type 48J, for speeds of 90 to 1000 rpm. Each has ten overlapping ranges, selected by a rotary switch. No damage is incurred by accidental selection of the wrong range.



Precision tachometer (Metron).

These instruments employ an electrical bridge circuit principle, and are self-calibrating. When calibrating, the sensitive speed measuring circuit is matched against internal precision resistors, thus insuring readings against changing ambient conditions.

The tachometer head employs only one rotating part, permanently lubricated for long, trouble-free life. No vacuum tubes are employed, and all parts have essentially unlimited life, according to the manufacturer.

Metron Instrument Co., 432 Lincoln St., Denver 9, Colo.

For additional data, request item K-149, using business reply card on page 205.

Label Producing Machine

A heavy-duty machine for producing complete small paper or cloth labels from rolls of blank material is available for one or two color work. The Model 126 machine is fed from a roll of label stock which is printed and then rewound, perforated for tearing and then rewound, or cut off and stacked. The machine allows printing of an area up to 3⅛ x 2¼ inches on label sizes up to 6 x 2½ inches.

A new feature of the machine is a fusing attachment, electrically heated and thermostatically controlled, which fuses the cut ends of labels to present smooth, sealed ends for application without pinking or folding under ravelled or unfinished ends.

Two styles of counting devices are available for the machine. One is a pre-determining automatic counter which stops the machine after the desired number of labels has been printed. The other records each printing stroke only.

Markem Machine Company, Keene, N. H.

For additional data, request item K-146, using business reply card on page 205.

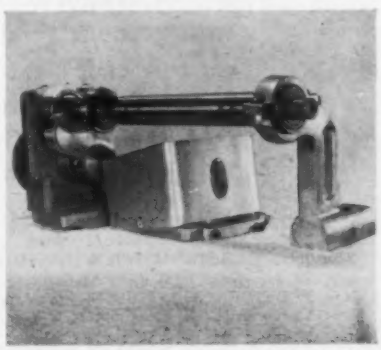
Ball Bearing Comb Box Features Low Maintenance

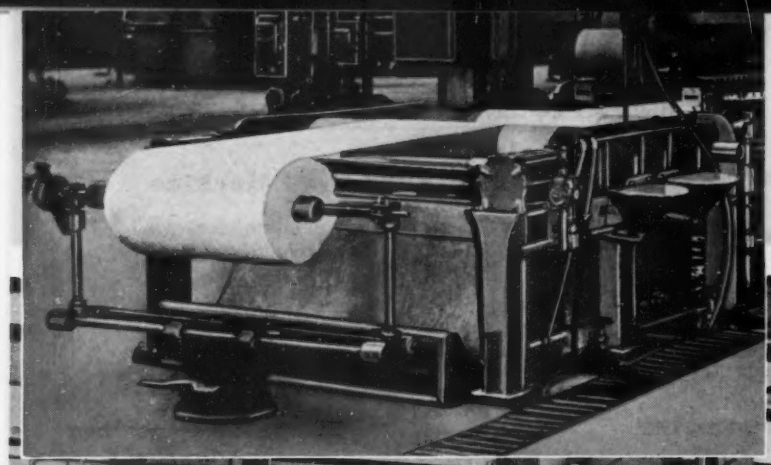
A comb box identified as "The Colonel" for cards has been placed on the market. According to the manufacturer, this type "B" comb box is lubricated with grease through two fittings, the interval for lubrication being about 60 days.

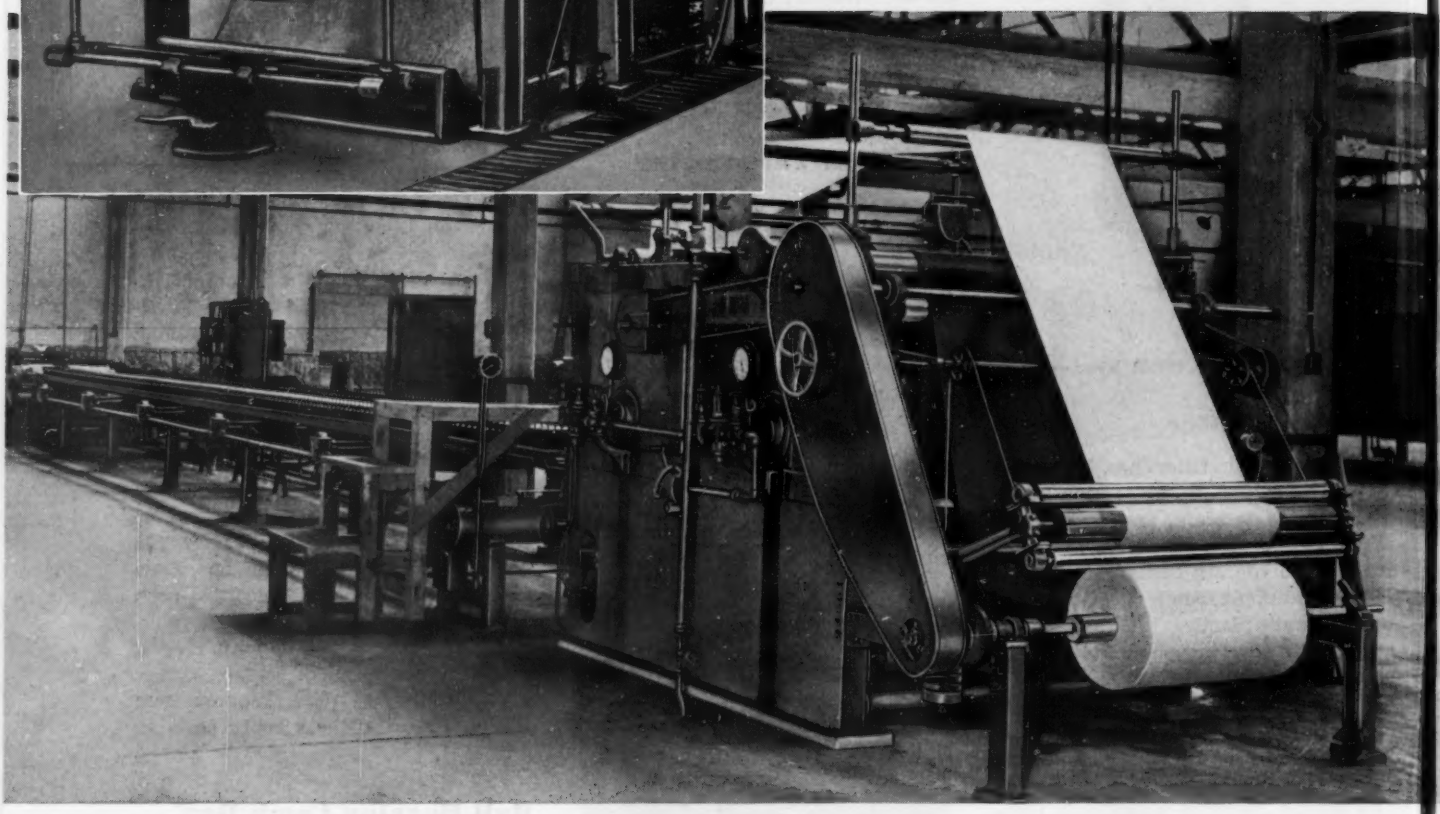
The manufacturer claims the following features for the box: Sealed ball bearings which will not permit grease seepage; a long comb stroke which permits a low operating speed; low maintenance cost.

The comb shaft sleeve has a ⅞"

Ball bearing comb box (Odom).







Why Butterworth Builds a Palmer Range *this* way

Take a practical mill man's word for it—the latest type Butterworth-built Palmer Finishing Range gives more production and better tension control than ever before possible. It includes these Butterworth Machines:

(a) 4-roll horizontal Pad or Quetsch;
(b) 60-foot straight automatic Tenter with automatic rail guiders at entering end;
(c) Palmer finishing unit with 60-inch diameter Cylinder and Winder.

This high-speed range is driven by AC-DC generator set with individual motors on Pad and Tenter. There are specially designed tension controls between each unit.

We built this latest-type Palmer Range with practical mill men offering suggestions and criticism at every stage. It put our design department on the spot—but we like it that way. And so do our customers.

Let us tell you about the results in terms of increased production and better finishing.

Butterworth

H.W. BUTTERWORTH & SONS CO., Phila. 25, Pa.

PROVIDENCE DIVISION, Providence, R. I. - 1211 Johnston Bldg., Charlotte, N. C. - W. J. Westaway Co., Hamilton, Ont. - ARGENTINA: Storer & Cia., Buenos Aires - AUSTRALIA: Noel P. Hunt & Co., Ltd., Melbourne - BELGIAN CONGO: Paul Pflieger & Co. - BOLIVIA: Schneiter & Cia., Ltda., La Paz - BRAZIL: Cia. Industria e Commercia, Sao Paulo e Rio de Janeiro - CHILE: Schneiter & Cia., Ltda., Santiago - COLOMBIA: C. E. Halaby & Co., Medellin - CUBA: Thos. F. Turrull, Havana - ECUADOR: Richard O. Custer, S. A., Quito - FRANCE: Georges Campin, Le Perreux, Seine; Rene Campin, Sceaux, Seine - MEXICO: Slobotzky, S. A., Mexico, D. F. - MIDDLE EAST, MEDITERRANEAN, BALKANS, AUSTRIA, HUNGARY, CZECHOSLOVAKIA, INDIA: Arlind Corporation - NORWAY: Dr. Ing. Otto Falkenberg, Oslo - PERU: Custer & Thommen, Lima - SOUTH AFRICA: Texmaco, Johannesburg - SWEDEN: Elof Hansson Goteborg - URUGUAY: Storer & Cia., Ltda., Montevideo - VENEZUELA: Herbert Zander & Co., Caracas.

bore and holds shaft with two set screws. The tailstock bearing is adaptable to fit shafts ⅞" to 27/32". All bearings are of standard design and are shielded against the infiltration of dust and lint.

Adapter plates of graduated sizes adapt the box for 4" to 8" models. The comb box may be changed from right to left hand or left to right hand by loosening four screws and reversing the adapter plate.

An aluminum cover is standard equipment for the box. Transparent plastic covers are available on request.

Maximum operating speed is 1750 rpm.

Odom Machine Manufacturing Corp., Roswell, Georgia.

For additional data, request item K-150, using business reply card on page 205.

Temperature Controller for Electric and Gas Heaters

A new series of temperature controllers designed for use with electric and gas heating units has been announced. Available with or without pyrometers, these stepless input controllers are suitable for electric and gas furnaces, ovens, pots and other similar applications.

The operation of this temperature controller, called "Infitrol" by the builder, is simple. Only a small portion of current is allowed through the heating elements, an amount sufficient to maintain definite temperatures. Since no resistance is used, no current is wasted. Gas equipment is controlled through a solenoid valve.

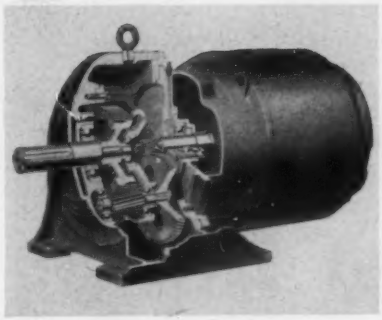
The Model IF 4 comes equipped with a pyrometer calibrated to 2000° F. It can be supplied for other temperature ranges. Where pyrometer accuracy is not required or where there is a pyrometer already in the installation, the Model IF 2 is furnished.

K. H. Huppert Co., Chicago, Ill.

For additional data, request item K-126, using business reply card on page 205.

Reliance Motors

Of unusually compact design is a new gearmotor built in six basic sizes capable of delivering from 1 to 60 horsepower. The helical type horizontal units are complete integral a-c or d-c motors with flange mounting and operate in a speed range of from 7½ to 780 rpm. Single, double, and triple reduction units are available in each size. It is stated that use of a flange-mounted motor, complete with bearings and bracket, and with shaft modified only to permit mounting of a hardened pinion, will permit many standard or special motor enclosure types to be used without expensive adaptations.



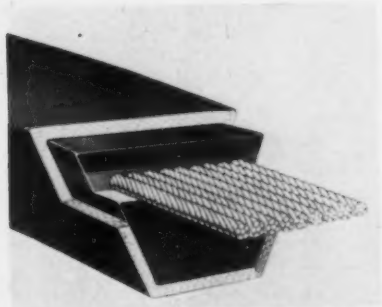
Gearmotor (Reliance).

An explosion-proof, corrosion-resisting a-c motor for general application in the textile, chemical and other industries has also been developed. It will be offered in frame sizes 203 through 326.

Built to standards set by the Underwriters' Laboratories for operation in Class I-Group D (for locations where hazardous conditions, i.e., gasoline, oil, naptha, alcohols, acetone, lacquer solvent vapors and natural gas are present), the new motor has also been made explosion proof.

Reliance Electric & Engineering Co., 1076 Ivanhoe Rd., Cleveland 10, Ohio.

For additional data, request item K-156, using business reply card on page 205, and specify motor.



Textile type V-belt (Goodyear).

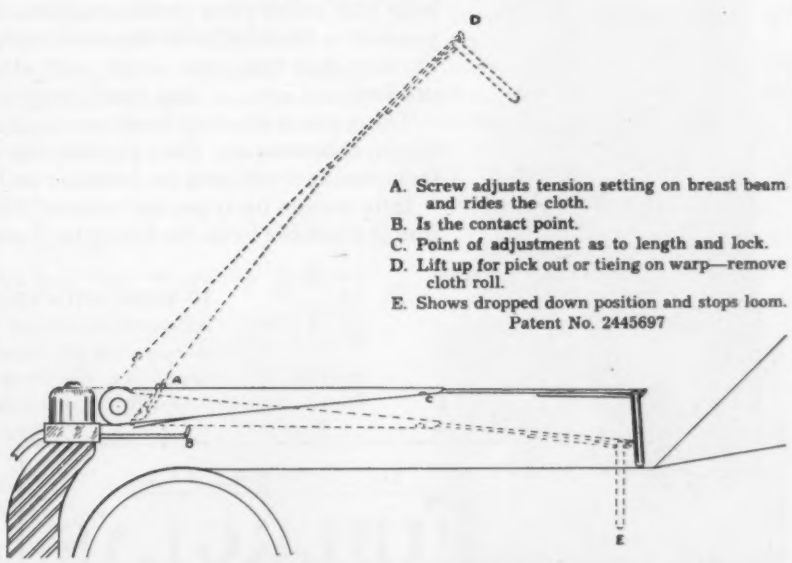
Special Textile V-Belt

A special textile V-belt for individual motor drives on spinning frames and similar equipment has been announced.

Known as the "Goodyear Textile Special," the new belt is being made in sizes to fit standard "B" section V-belt sheaves.

The belt is reported to be designed especially to withstand the severe

Electric Thin Place Detector

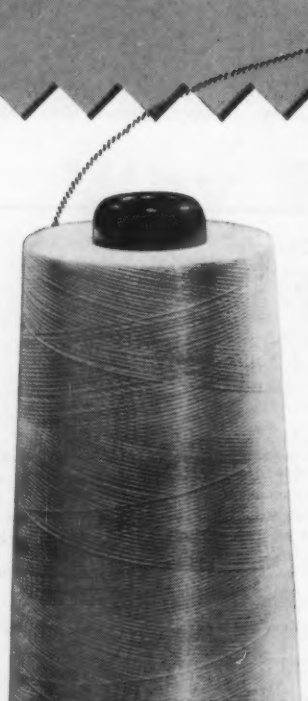

D
A. Screw adjusts tension setting on breast beam and rides the cloth.
B. Is the contact point.
C. Point of adjustment as to length and lock.
D. Lift up for pick out or tieing on warp—remove cloth roll.
E. Shows dropped down position and stops loom.
Patent No. 2445697
A
C
E

The electric thin place detector shown here can be used on looms equipped with electric drop wire stop motions. According to the manufacturer, the device is easy to install and maintain. A. B. Shelton Corp. P. O. Box 1014, Columbus, Ga. For additional data, request item K-258, using business reply card on page 205.

FIBERGLAS* YARNS

provide Textile Designers and Manufacturers with a unique combination of advantages not present in any other yarn!

- HIGH TENSILE STRENGTH
- DIMENSIONAL STABILITY
- NONCOMBUSTIBILITY
- RESISTANCE TO OILS AND ACIDS
- RESISTANCE TO MILDEW AND ROT
- EXCELLENT ELECTRICAL PROPERTIES



Designing a fabric that requires dimensional stability as well as high tensile strength? Weaving a fabric that must resist oils and acids—that won't support combustion? If you are, it will pay you to investigate Fiberglas Yarns because, basically, they possess all of these characteristics . . . making them a natural to help you solve your problems. Yes, with Fiberglas Yarns you can design and produce a fabric that combines dimensional stability with high tensile strength. Further than that, this fabric will also offer resistance to oils and most acids, mildew and rot . . . and won't support combustion.

These yarns also can be woven in combination with other fibers such as cotton, rayon, asbestos, etc. They provide the opportunity for designers, weavers, manufacturers and retailers to produce and promote new and unusual fabrics.

Information on types and sizes of Fiberglas Yarns and other technical information is available from the Fiberglas Textile Div., 16 East 56 St., New York 22, N.Y.

TO WORK WITH YOU: A fully equipped Customer Service and Processing Laboratory is located at our Fiberglas plant in Ashton, Rhode Island. In co-operation with weaving mills and cloth processors, work will be carried on in this laboratory to help you develop suitable applications for glass yarns and fabrics. Process development activities and weaving experiments are also conducted at this plant.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario

OWENS-CORNING FIBERGLAS Yarns

TM. REG. U.S. PAT. OFF.

*Fiberglas is the trade mark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

overloads resulting from high starting torque that frame drives are subjected to. Tension members are constructed to provide over 100 per cent increase in breaking strength and to "give" under shock loads, it is claimed.

Extra thickness of the outside cover and improved belt design are said to assure even distribution of the wearing surface on sheave grooves.

Goodyear Tire & Rubber Co., Akron 16, Ohio.

For additional data, request item K-125, using business reply card on page 205.

Rope and Open Width Washers Feature Tensionless Operation

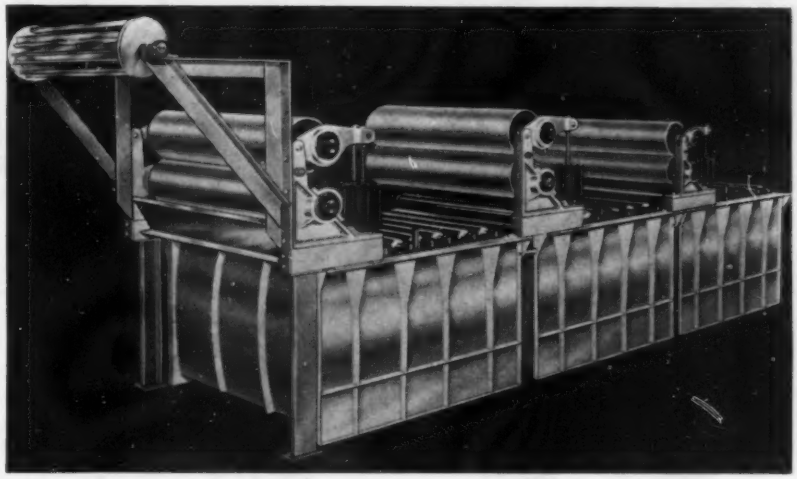
The Tensitrol principle for completely tensionless wet finishing of fabrics was introduced in April of this year in its application to rope and open width washers and to economical continuous dyeing methods.

This new principle, according to the manufacturer, permits fabrics of all kinds to be processed without damage at speeds of 300 or more yards a minute. The fabrics are constantly and totally relaxed and thus free to shrink or sag.

The Tensitrol principle, in the case of an open width washer, consists basically in using idler top rolls and driven bottom rolls, with the latter driven faster than the exit rolls by a certain percentage greater than any percentage of shrinkage that could occur. If the fabric tends to shrink during processing, it is pulled tighter against the driven rolls and in this way is propelled ahead to forestall any tension that might develop. Tensionless operation is thus achieved without change in speed of any moving part of the machine.

Rodney Hunt Machine Co., Orange, Mass.

For additional data, request item K-155, using business reply card on page 205, and specify machine.



Open width washer features tensionless operation (Rodney Hunt).

Industrial Humidifier Has Spun Glass Filter

Producing water vapor mechanically without heat, an industrial humidifier employs a replaceable spun glass filter which cleanses air before it passes through the unit. Water is vaporized by a spinning disk which throws water against a breaker comb. Fan attached to pump assembly draws in sufficient air to hold moisture in suspension and creates sufficient pressure within machine to discharge vapor through flared holes located in dome.

The unit can vaporize more than 1 gallon of water per hour, and vapor is diffused evenly over large areas without additional air circulation, according to the manufacturer. The humidifier can be operated singly or in series with others, all controlled by single humidistat control.

Units are hung from the ceiling and require only electrical and water connections.

Walton Laboratories, Inc., 1186 Grove St., Irvington, N. J.

For additional data, request item K-250, using business reply card on page 205.

Instrument Measures Stretch or Shrinkage

To provide more accurate control in processes wherein materials are subject to change due to differences in the rate of travel, a new Speed-Ratio tachometer has been manufactured.

The tachometer includes a special speed-ratio indicating instrument which operates in conjunction with two small d-c generators to convert mechanical rotation into measurable electrical quantities.

The generators are simply connected to the input and output drives of the machine, and wired to the ratio indicator. This indicator, or ratio meter, is calibrated in whatever terms are desired; such as % stretch, % shrinkage, % elongation, etc.

Typical of the operations to which the tachometer is now being applied is that of indicating per cent stretch at all times during sizing operations in the textile industry, and to indicate the shrinkage of fabrics in the sanforizing process.

Weston Electric Instrument Corporation, 617 Frelinghuysen Ave., Newark 5, N. J.

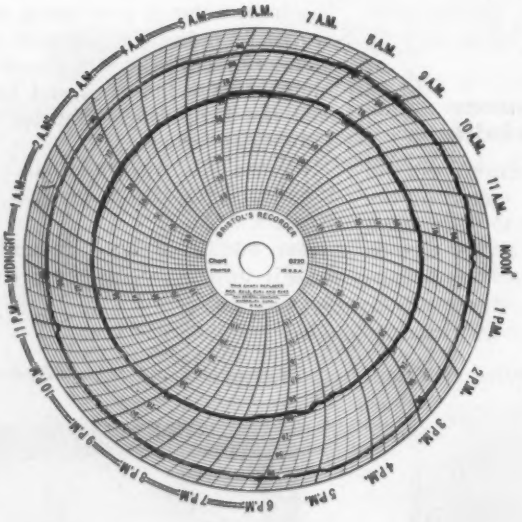
For additional data, request item K-251, using business reply card on page 205.

Filter-protected humidifier (Walton).

Speed-ratio indicator (Weston).

BUT . . . it can't compare with the constant atmospheric conditions in this R. I. equipped mill

Every day can be perfect production weather in a R.I. humidified mill. It's a breeze to attain new production records as textile fibers run more smoothly in correct humidity, while room temperatures reduced to the right degree mean greater labor efficiency and comfort. The RIHCO principle of humidification and evaporative cooling permits the use of smaller air compressor units, thus reducing installation and power costs. No matter what your textile process may be, a RIHCO system will bring you new profits to write home about. Why not send for full information today?



This is an actual humidity and temperature record taken in the spinning room of a southern mill equipped with a RIHCO Evaporative Cooling System. Around the clock, the RIHCO system's automatic controls held the humidity close to 60%, while the excessive temperatures were reduced as much as 20 degrees to a more comfortable average of 90.

R.I. HUMIDIFIER & VENTILATING CO.

Established in 1912

99 CHAUNCY ST. BOSTON 11, MASS.
1043 COMMERCIAL TRUST BLDG. PHILADELPHIA 2, PA.
P. O. BOX 750 ATLANTA 1, GA.
R. I. HUMIDIFIER & VENTILATING CO. OF CANADA LTD.
980 ST. ANTOINE ST. MONTREAL, 3, CANADA

Pin Drafting Machine

A new pin drafting machine for processing straight wool, blends of wool with cotton or synthetic cut staple, is now being produced.

The pin drafter represents an advanced design of a screw gill, incorporating functions of the open-type drawing machine, as well. According to the manufacturer, the new unit eliminates several operations between combing and roving, in the American system of processing. In the Bradford system, the pin drafter takes the sliver to the reducing operation, accomplishing in five or six operations that which conventionally requires eight or nine separate steps.

The pin drafter is double headed, combining productive capacity with flexibility of operation. Faller heads are of the full intersecting type.

Either can creel or ball creel feed is available.

From the creel, the stock enters sliver guides and passes through feed stop rollers. A splicing or conveyor belt then carries the stock to a condenser, without appreciable drag on the latter.

A condenser is used in place of back draft rollers. It tensions the stock slightly prior to entering the pins and serves to bulk up the stock to uniform density in the pins, avoiding flares and edge drafting.

Each of the faller sections is 5" wide by 7¾" long, and operates at 1030 drops per minute. This is equivalent to a sliver entering speed of nine yards per minute. Capacity per head is 1000 grains per yard of entering slivers. Feed saddles are tapered from entry to discharge to compensate for draft.

The draft roll section involves a three-roll unit, consisting of an inner ⅞" diameter fluted nip roll and a forward 2⅝" fluted roll, both in contact with a 2½" synthetic-covered pressure roll. Nip length from faller section is adjustable from 13/16" minimum to 1½" maximum.

The draft is entirely dependent on the speed of the draft roll section, and hence is readily controlled by an easily accessible change gear.

Calender rolls transfer finished sliver to coiler heads.

Automatic safety stops go into action under four conditions. If broken or run-out ends are received from the creel, a stop motion is activated. Should roll laps or breaks occur on the discharge side of the draft rolls, another motion shuts down the machine. A faller lap stop motion prevents faller laps. An electrical yardage counter is also capable of stopping the machine at any set yardage.

The Warner & Swasey Co., 5701 Carnegie Ave., Cleveland 3, Ohio.

For additional data, request item K-224, using business reply card on page 205.

Onyx Developments

The following compounds for the processing of textile goods were announced during the year:

A resin finish, designated NCF Paste, has a broad range of uses in treating all types of cellulose fabrics. Its principal use is for crush-proofing.

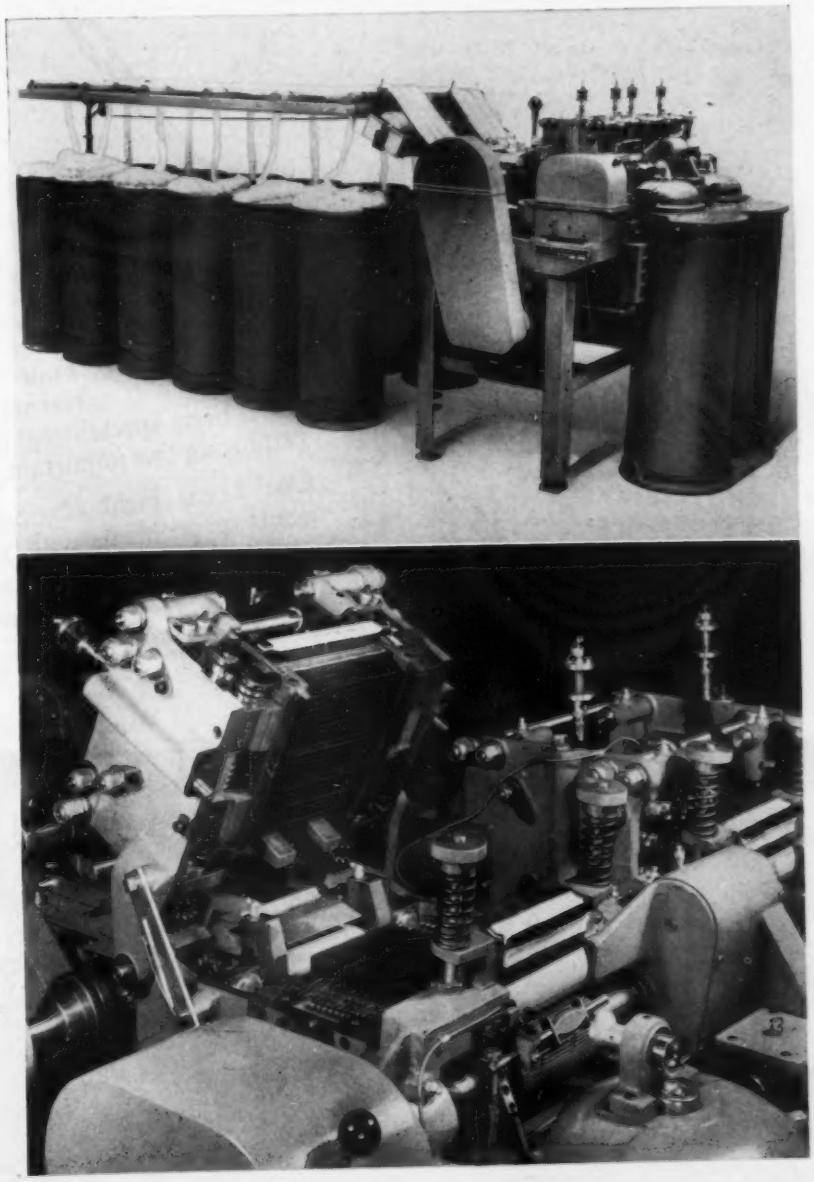
An anionic wetting agent, designated NSAE Paste is a surface-active compound stable in carbonizing acids.

Stearo Glyceryl Sulfate N, a sulfonated tallow with a high SO_3 content, is used as a lubricant and softening agent.

Maprofix Paste, an anionic surface-active material with emulsifying and detergent properties, is a scouring agent for all types of wool, and it is used for many other detergent processes.

Imularv P and Imularv S are cation-active quaternary compounds with insecticidal, fungicidal and bactericidal properties. They are effective moth-proofing agents with notable resistance to dry cleaning and laundering. Imularv P is used in

The Warner & Swasey pin drafter. Upper photo, general view of machine with can type creel. Below, close-up of faller section.



If You Wish to Weave *Quality* Fabrics with *SPEED & ECONOMY* -

do as all the large and successful mills are doing over the world, by using

Ste-Hed-Co FLAT STEEL HEDDLES

America's Largest Loom Harness Equipment Producers

Only by using the most modern equipment can you expect to avoid delays and produce quality fabrics. The modern high speed Looms of today demand stronger, more durable, more flexible and better designed Heddles.

Your Loom is no better than the Harness Equipment you use. We have been specializing for 50 years in designing and producing this important part of the Loom.

Our Local Field Engineers will gladly discuss your needs or problems with you, or write us directly.

Profit by this experience and our unusual facilities.

(Loom Harness Equipment — Flat Steel Heddles — Loom Frames & Reeds — Shuttles — Drop Wires & Warp Preparation Equipment)

STEEL HEDDLE MFG. CO.

2100 W. ALLEGHENY AVE., PHILADELPHIA 32, PA.

and

SOUTHERN SHUTTLES DIVISION

621 E. McBEE AVE., GREENVILLE, S. C.

Other Offices and Plants

Atlanta, Ga. • Greensboro, N.C. • Providence, R.I. • Montreal, Can.

water solution. Imularv S is used in organic solvents.

Mapromol HSY is a softening agent producing a dry, full, round, hand on all types of textile fabrics. It does not develop yellow tints in fabrics on ageing, and has no effect on the light fastness of colors, according to the manufacturer.

Larvonil P is a silico fluoride type of moth-proofing agent which shows resistance to dry cleaning. It is said to impart fungicidal and bactericidal properties to treated goods.

Phi-O-Sol WA is a wetting, penetrating, and rewetting agent. Dullatone CA is a cation-active pigment duller which provides a soft hand to the fabric.

Onyx Oil & Chemical Co., Warren and Morris Streets, Jersey City, N. J.

For additional data, request item K-151, using business reply card on page 205, and specify product.

Forced Draft Dryer for Moisture Determination

A small forced draft dryer which can be connected to a mill compressed air line, has been developed for drying fibers for moisture determinations. No pump or motor is necessary for operation. According to the manufacturer, there is a definite economy in eliminating the pump and motor, and, in addition, it eliminates vibration which might give trouble where sensitive balances are in use on the same laboratory tables.

The small dryer can accommodate two 60-gram samples, or four 20-gram samples stacked one above the other. By forcing heated, filtered air through the samples, moisture is removed from large samples in approximately seven minutes.

Temperature is controlled by a thermo-regulator to ± 1° C. A pressure regulator is incorporated in the machine so that the pressure in the mill air line can be reduced appropriately for use in this small apparatus.

A similar model is available with built-in pump and motor for laboratory use when compressed air is not available.

Baird Associates, Inc., 33 University Road, Cambridge 38, Mass.

For additional data, request item K-109, using business reply card on page 205.

Mechanical Lubricator for Centralized Systems

A mechanical lubricator of the cyclic type has been designed for use with centralized lubrication systems wherever adaptable. Being either rotary or ratchet-driven by the machine it lubricates, the device automatically discharges at pre-determined intervals a measured amount of oil into the distribution system. No attention is required except for periodic filling of the oil reservoir.

The lubricator consists of a spring-discharge piston pump suspended from the lubricator cover. A cam is rotated by means of gearing, slowly raising the piston and drawing a measured volume of oil into the pump cylinder. At the top of the stroke, due to the quick-drop cam construction, discharge takes place rapidly under the action of the spring.

The cycle is determined by the drive speed combined with reduction gearing built into the unit. Volume of discharge per cycle is normally 1.5 cc. For special requirements, the piston stroke may be adjusted to give a volume of from 1 cc to 2 cc maximum. An "instant feed" button is provided by means of which the pump may be operated by hand. This permits quickly filling the distributing line after machine assembly and affords a ready means of checking the functioning of the lubricating system at any time.

Lubricators of various capacities and drive speeds are available to meet the lubrication requirements of a wide range of production machines, including textile machinery such as spinning frames, looms, etc.

Bijur Lubricating Corp., 43-01 Twenty-second St., Long Island City, N. Y.

For additional data, request item K-110, using business reply card on page 205.

New Model Table Lift for Cloth Folders

Modification of the design of the Lewis pneumatic table lift for cloth folding machines has resulted in the production of a lift that is easier to install and operate than the previous model. A separate foot-operated valve is utilized to control the compressed air, with the result that the air lift itself can be placed in the best position for its correct operation, and also the foot treadle can be placed in the position most convenient to the operator.

The use of the air lift does not affect the operation of the folder in any respect other than raising the table. It is made in two different sizes: the more common size, a 5" diameter cylinder, is used with 25 to 35 pounds pressure; a 4" diameter cylinder is used where a pressure of 40 to 50 pounds is available.

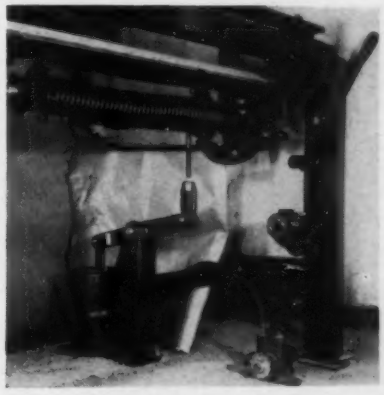
Curtis & Marble Machine Co., 72 Cambridge St., Worcester 3, Mass.

For additional data, request item K-111, using business reply card on page 205.

Forced draft dryer (Baird).

Cyclic lubricator for centralized systems (Bijur).

Pneumatic table lift (C&M).



GREENVILLE, SOUTH CAROLINA

New Loom Motor

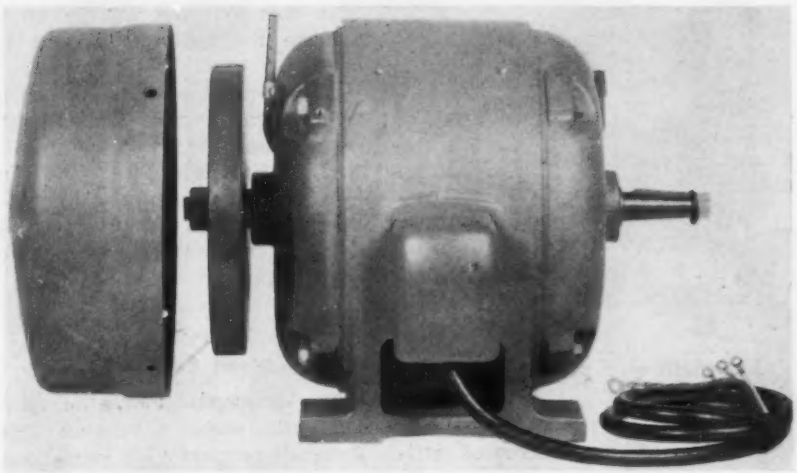
A new line of totally enclosed motors has been especially designed to meet the particular requirements of modern looms. They are available in sizes of 2 hp and smaller, all built in a single frame diameter.

In addition to its special torque characteristics which are tailored to meet the pulsating load of looms, the design features sturdy steel-backed bronze bearing linings, conveniently located oil fittings, short overall length, and a new lead arrangement. The latter consists of a tough multiconductor, jacketed cable which eliminates the need of conduit between motor and starting switch.

The motors are also available with a compact, protected flywheel which, according to the manufacturer, contributes substantially in many cases to sustained higher loom speeds and smoothness of loom performance.

General Electric Co., Apparatus Department, Schenectady 5, N. Y.

For additional data, request item K-124, using business reply card on page 205.



New loom motor with protected fly wheel for smooth operation. (G.E.)

"Scotch" Textile Tapes

Four new "Scotch" brand tapes have been designed to meet the special requirements of the textile trade. All four tapes have pressure-sensitive adhesive, enabling them to grip tightly immediately upon contact, the producer said.

"Scotch" Textile tapes No. 280 and No. 925 are for holding the ends of warp threads during warping and slashing operations, and for sealing holes in jacquard pattern cards when modification of the cards is necessary.

Tape No. 916 is for sealing outer wraps of warps to protect against damage in shipment and for holding the final lap of a roll of cloth to prevent unwinding during the subsequent handling.

No. 400 double-coated textile tape is for holding yarn ends on creel, for adhering fur or felt in shuttle, and for starting the wind of cloth on "Simpson" shells. No. 400 has pressure-sensitive adhesive on both sides.

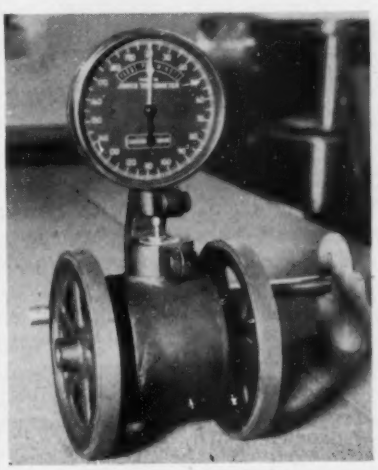
An unsupported film of pure adhesive was announced in July. Called "Scotch-Weld" bonding film, it is transparent, roughly resembles cellophane in appearance, is provided in rolls like tape and is not tacky to the touch. It is 100% adhesive, with no supporting material in the film.

The film is placed between units to be bonded and is cured by simultaneous application of heat and pressure. Listed as major "Scotch-Weld" qualities are high bonding strength to a wide variety of materials, ease of application, simplicity of production line use, long life on the roll, assurance of adhesion over the entire surface with no "starved" areas, and inertness in water, oils and most solvents.

Minnesota Mining & Manufacturing Co., 900 Fauquier Ave., St. Paul, Minn.

For additional data, request item K-143, using business reply card on page 205, and specify product.

Special Purpose Tachometer



This tachometer was developed for fixed installations to indicate speed of moving cloth or other materials. It may be installed by attaching a bracket to the machine or table over which the material passes. Wheels on the instrument actuate the dial mechanism. Durant Mfg. Co., 1973 N. Buffum St., Milwaukee 1, Wis. For additional data, request item K-277.

Lever Operated Hoist

A lever operated hoist is marketed under the trade name "Tugit." This tool is available in capacities of one and two tons.

Instead of effecting hook movement by a ratchet lever acting directly on a ratchet wheel integral with the lifting sprocket or pocket wheel, in the "Tugit" the lifting is effected by a lever acting on a gear train exactly the same as in hand or electrically operated hoists.

Interposed between the operating lever and the lifting pocket wheel is a load brake. In addition, the device is equipped throughout with anti-friction bearings.

The operating handle is only 12 inches long, thus the "Tugit" may be operated in close quarters and may be stowed easily in tool boxes.

Shaw-Box Crane & Hoist Division, Manning, Maxwell & Moore, Inc., Muskegon, Mich.

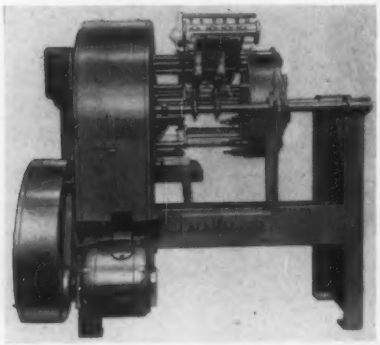
For additional data request item K-144, using business reply card on page 205.

Arkansas Chemicals for the Finisher

Aripel L C is a combination anti-fume agent and softener offered for use in finishing acetate rayon fabrics to improve the gas resisting properties of the colors used in dyeing and impart a soft, smooth, full-feeling finish without the use of any other finishing agents.

Dergon O M is a synthetic detergent for use in scouring and fulling woolens.

It may be used as a replacement for soap or as an addition to the usual



Automatic quill polisher (Nash).

soap fulling liquor. Increased efficiency of the fulling operation is claimed due to its penetrating and lasting properties.

Keranol N K is offered for finishing cotton or rayon fabrics. It is a substantive product which, when used alone in the bath as a finish, produces a very soft, mellow, velvet or glove-like hand. It is also recommended for use in conjunction with all types of resin finishes as a plasticizer and softener.

Since Keranol N K is not affected by variable pH values, it may be used in neutral, alkaline or acid baths.

The Keranol N K finish is durable to washing and dry cleaning and resistant to yellowing, even at excessively high temperatures, according to the manufacturer.

Arkansas Company, Inc., P. O. Box 210, Newark, N. J.

For additional data, request item K-103, using business reply card on page 205, and specify product.

Automatic Quill Polisher

An automatic quill polisher is designed to clean, buff, and polish loom bobbins. The operation is accomplished automatically at production rates from 20 to 40 pieces per minute. The announcement stated that there is no harsh abrasive action during the operation, and the original finish coating of the quill remains intact.

This machine assures smooth quills at all times, thereby eliminating broken picks. The quills are free from sharp surface projections and are burnished to a high dry luster. All dirt is removed from the grooves, and the resultant polish has a surface free from any deposit with a finish superior to new quills, the manufacturer claims. According to a bulletin, repeated polishing of quills with this machine will in no way damage the quills or reduce their life.

A four-row polishing rack is provided with proper pad and brush accessories.

J. M. Nash Company, 2360 North 30th Street, Milwaukee 10, Wis.

For additional data, request item K-181, using business reply card on page 205.

Heavy Duty Vacuum Cleaner

The development of a heavy duty industrial portable vacuum cleaner designed primarily for use in textile mills has been announced.

A self-cleaning filter is reported to keep the machine at a high level of operating efficiency and to save time required for cleaning. The tank has a capacity of 60 gallons.

Portable vacuum cleaner (Breuer).

Another exclusive feature claimed for the unit is that it can be instantly converted from suction to blowing, making available a powerful blast of clean air for blowing out parts of machinery which are inaccessible for cleaning by suction.

Two intakes are provided, enabling two operators to work simultaneously with the cleaner. According to the manufacturer, up to 60 feet of hose can be connected to each inlet and an area of 30,000 square feet of bare floor can be cleaned without moving the machine.

Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40, Ill.

For additional data, request item K-228, using business reply card on page 205.

PMA Size for Nylon Warps

Polymethacrylic acid (PMA) textile size is now available. It is reported to be particularly suited for slasher sizing raw nylon continuous filament warps.

PMA is readily water soluble, easy to apply and is easily removed in scouring, according to the manufacturer.

Since PMA has excellent adhesion to raw nylon, loom shedding is practically eliminated when PMA is applied to the warp uniformly and in proper amounts. PMA sized warps generally exhibit a satisfactory break at the split rods. With normal pick-up of size and proper drying on the cans, the split should occur well before the warp reaches the first bar.

For scouring, conventional hot water, soap, and alkaline scours have been found satisfactory in removing PMA from woven fabrics. Yarn which has been tinted may require special scouring procedure.

Packaged as a dry powder, PMA size is available in 50 and 100 pound, net, containers.

E. I. Du Pont de Nemours and Co., Nylon Division, Wilmington 98, Delaware.

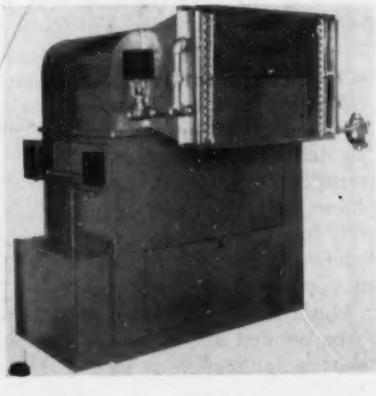
For additional data, request item K-218, using business reply card on page 205.

System Combines Heating with Humidification

A unit system that combines heating with humidification in one machine is now being manufactured.

In cold weather the air is both heated and humidified inside the machine. Coils for heating are installed inside the regular Air-Perme-Ator unit, and steam is automatically turned on or off by thermostatic

Model B-5 humidifying unit (Air-Perme-Ator).



SARAN

BY NATIONAL

Beautiful! Care-free! Sales go to seat covers woven of SARAN!

Of course, motorists prefer the seat cover that provides the ultimate in good looks and long wear! They want the same fine qualities that distinguish saran in its widely diversified textile applications. For versatile saran monofilaments, as fine as .005", weave new measures of brilliant beauty, durability and usefulness into a host of today's functional fabrics . . . and constantly inspire new fabric trends, new sales opportunities. Write to us for details.

Suit and accessories from Saks Fifth Avenue, Detroit

REG. U.S. PAT. OFF.

Saran by National

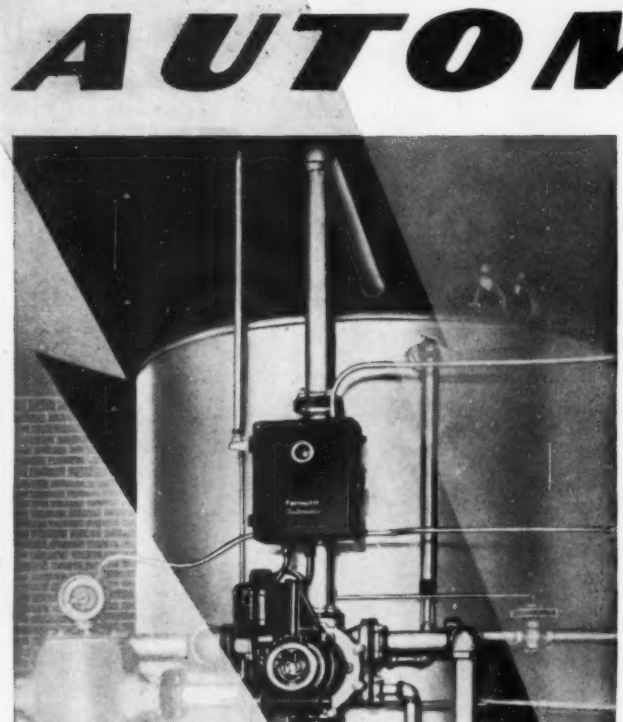
ODENTON, MARYLAND

New York: Empire State Building • Los Angeles: Bankers Building

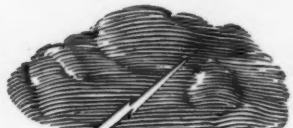
SARAN

SARAN BY NATIONAL *denotes monofilament, rattan and tape manufactured by The National Plastic Products Company from Dow's saran, and supplied to mills, weavers and other fabricators.*

ELECTRIC AUTOMATIC



Permutit Zeolite Water Softeners



LOWER COSTS

Permutit quality controlled process water cuts production costs — actually saves money — by safeguarding fabric quality. Permutit water conditioning equipment guards against spotty off-color dye lots, or chemical reactions that spoil the finish of fabrics.

GIVE ZERO WATER CONSTANTLY

Permutit's electric-automatic controls insure a continuous supply of completely softened water.

SAVE LABOR

that was wasted. Gone are the hours and hours required with *manual* regeneration. Only Permutit electrically controlled, automatic water softeners have the exclusive multiport valve control which makes possible automatic regeneration.

For complete details on Permutit's modern water conditioning equipment, write The Permutit Company, Dept. TI-11, 330 West 42nd Street, New York 18, N. Y., or The Permutit Company of Canada, Ltd., Montreal.

FOR 35 YEARS

Permutit

WATER CONDITIONING HEADQUARTERS

control. Either heat or humidification is given independently, or both may be given at the same time.

Fuel savings of up to 50% are claimed for the new unit. According to the manufacturer, there is no condensation of moisture on machinery or stock, since the unit releases no free moisture into the air.

Air-Perme-Ator Mfg. Co., 302 Preakness Ave., Paterson 2, N. J.

For additional data, request item K-217, using business reply card on page 205.

Tenter Chain

High speed tentering without excessive wear on the tenter chain and without extreme vibration is a feature claimed for the "43" tenter chain.

The chain is made of hardened steel with precision ground surfaces. It is a 2-inch pitch chain, practically eliminating the natural vibration of the chain entering and leaving the driving and idler sprockets.

This fact has many basic advantages on any size sprocket, according to the manufacturer. Impact loads and strains are minimized. The chain runs much more smoothly and quietly even at high operating speeds. The wear on the cloth holding or control parts of the clamp bodies is greatly reduced.

The "43" chain can be installed in almost any standard tenter, with changes in chain wheels, idlers and openers.

H. W. Butterworth & Sons Co., Philadelphia 25, Pa.

For additional data, request item K-215, using business reply card on page 205.

Plya-Seal Ball Bearing Treadle Roll Unit

Treadle roll ball bearing units equipped with the recently developed Plya-Seal are now available.

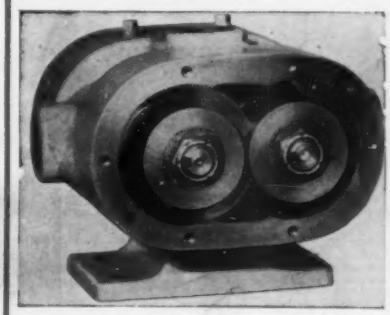
The Plya-Seal is a diaphragm-type contact seal made up of a flat, flexible sealing washer of synthetic rubber-impregnated fabric supported between flat, split retaining rings of spring steel. The seal remains firm and will not push out in operation, it is said. It effectively retains lubricant and excludes lint. Each bearing is factory-packed with the correct amount of specific lubricant for lifetime operation of the bearing lubricant which resists high humidity and oxidation.

Advantages claimed for the ball bearing treadle roll units are: elimination of fire hazard, of constant lubrication and of oil-soaked cotton packing around treadle rolls; free-running operation; longer life imparted to cams; possibility of removal of the seals for inspection of the bearing.

The Fafnir Bearing Company, Booth Street, New Britain, Conn.

For additional data, request item K-120, using business reply card on page 205.

Size Pump



Cut-away view of a new pump reported to be particularly adaptable for pumping size to slasher size boxes. The slow speed, crescent type rotors have no metal to metal contact within the pumping chambers. Spring loaded seals reduce shaft friction and leakage. Waterous Co., Thomson Pump Division, St. Paul 1, Minn. For additional data, request item K-274.

New Wool Oil

Proxol is a new wool oil prepared to satisfy the demands of the picker, carder, spinner, knitter or weaver, as well as the wet finisher and dyer. The product is described as a "multi-quality" lubricant having many unusual advantages.

It is reported that with this new product emulsions can be readily prepared, emulsion particles are small, and stability of the emulsion is great. Proxol does not oxidize during storage in the cloth to ultimately cause poor scouring, streaks, blotches and undesirable odors, according to the manufacturer.

Proctor & Gamble, Textile Division, P. O. Box 599, Cincinnati 1, Ohio.

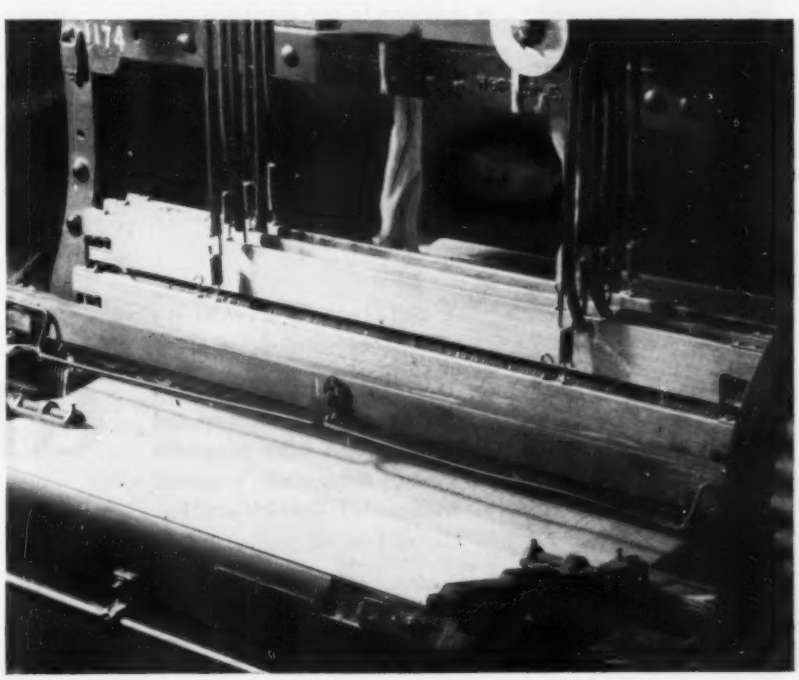
For additional data, request item K-220, using business reply card on page 205.

Aluminum Harness Frames

Aluminum Frames for either drawing-in type heddles or standard flat heddles have been recently developed. According to the manufacturer, the aluminum frame is strong, and it will not warp, twist or bow. The over-all depth of the frame is less, permitting weavers to reach over the tops of the frames more easily.

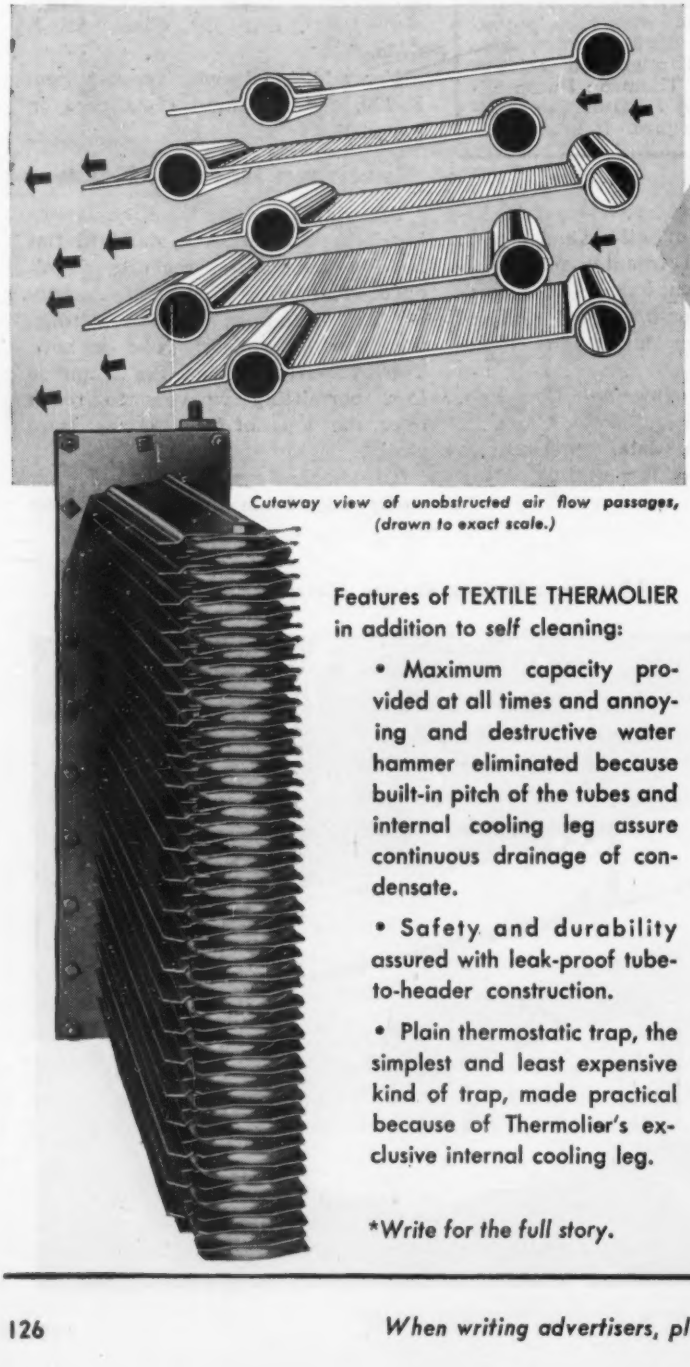
The hooks, eyes, studs, etc., are easily adjustable in or out of the

Aluminum harness frames (Emmons).



NOW A SELF-CLEANING UNIT HEATER

TEXTILE THERMOLIER



Cutaway view of unobstructed air flow passages, (drawn to exact scale.)

Features of TEXTILE THERMOLIER in addition to *self* cleaning:

- Maximum capacity provided at all times and annoying and destructive water hammer eliminated because built-in pitch of the tubes and internal cooling leg assure continuous drainage of condensate.
- Safety and durability assured with leak-proof tube-to-header construction.
- Plain thermostatic trap, the simplest and least expensive kind of trap, made practical because of Thermolier's exclusive internal cooling leg.

**Write for the full story.*

EASIER HOUSEKEEPING! MORE EFFICIENT HEATING!

Free flow of air self-cleans the heating surfaces. Lint, fly and dirt sweep clean from horizontal trailing edge.

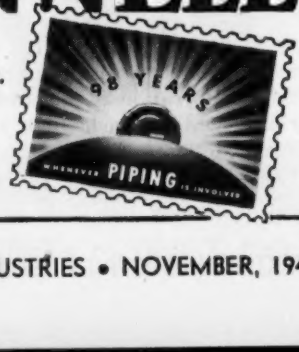
Incorporating all the features that have made the standard THERMOLIER a leader, the new TEXTILE THERMOLIER banishes the problem of clogging and loss of heating capacity, and cuts cleaning to almost nothing.

In actual weave room test, TEXTILE THERMOLIER proved its superiority:

- A conventional unit heater clogged solid in four days. Its heating capacity was lost as clogging increased. Finally it had to be shut down for a prolonged cleaning period.
- After three weeks of operation, TEXTILE THERMOLIER showed negligible accumlation. It was quickly cleaned with an air hose.

GRINNELL

GRINNELL COMPANY, INC.
Providence 1, R. I.



frame and will not loosen after adjustment. They are also readily adjustable sideways, permitting use of the frames in looms calling for different strap spacing.

The drawing-in type provides a true continuous slide for the heddles. In this type neither lock hooks nor studs are used, and no adjustment of the heddle rod is necessary.

Emmons Loom Harness Co., Lawrence, Mass.

For additional data, request item K-118, using business reply card on page 205.

Wrinkle Resistant Finish for Cottons

A wrinkle resistant finish which can be successfully applied to all types of cotton with little or no loss in tensile strength was recently announced. It is claimed that seersucker when treated with this finish remains fresh after several wearings.

The new finish, which goes by the name of "Superset," also controls shrinkage to 2 per cent or under, according to the announcement.

Melamine resin forms the basis of the new finish, modified in such a way that it does not affect the strength of the fabric. Tests show a very high anti-crease rating of from 3.0 to 3.6 in both warp and filling directions. In addition, a high degree of resilience is added to the cotton. A wide range of hand can be obtained all the way from the softer women's wear to the firmer men's wear effects. Another characteristic of the finish is that the treated fabrics dry clean satisfactorily without any loss of the effectiveness of the finish.

Processing requires no special equipment other than a curing unit.

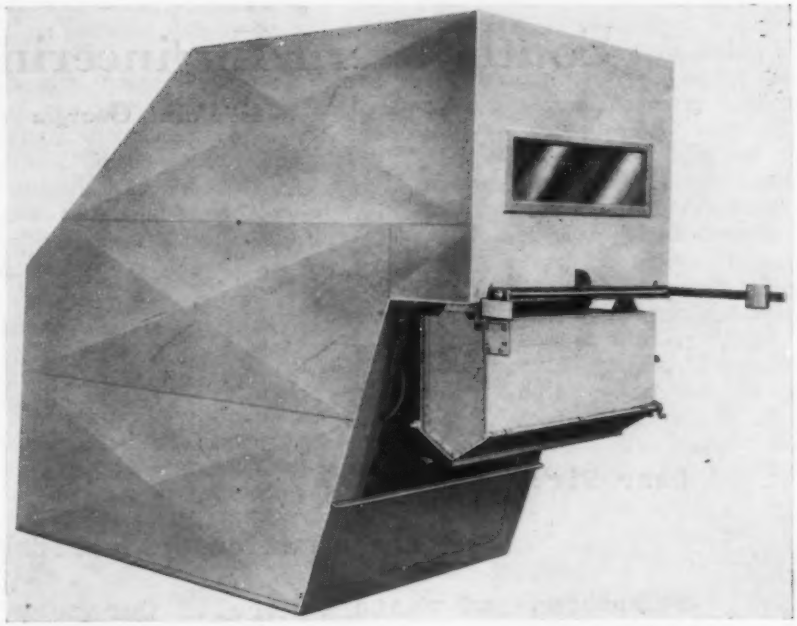
American Cyanamid Co., Textile Resin Department, Bound Brook, N. J.

For additional data, request item K-225, using business reply card on page 205.

Feeder Features Automatic Weighing Mechanism

The "Fiber Meter" is a new type of feeder which incorporates an automatic weighing mechanism to make possible accurate, uniform blending of raw stock.

The machine will handle from 200 to 500 pounds of fiber per hour, delivering it to the blender in any desired unit of from 8 to 32 ounces. A battery of them—one for each of the fibers to be fed—will exactly proportion the fibers and deliver them to the blender simultaneously. Since the blender is fed in precisely measured small quantities, the homogeneity of the finished product is assured, according to the manufacturer.



The "Fiber Meter" for blending fibers (Dodenhoff).

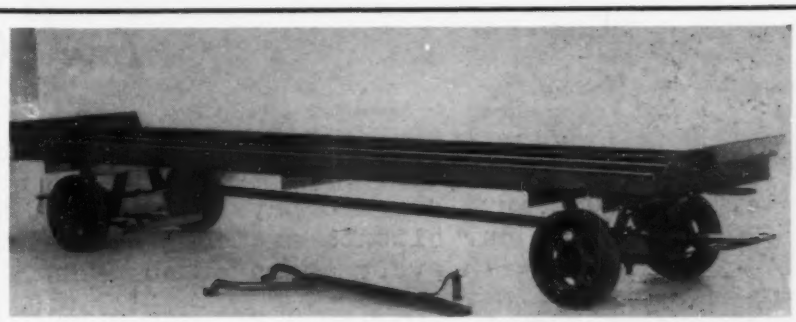
The weighing mechanism is said to be virtually free from friction.

The body is of heavy gauge steel, welded construction. The entire electrical system, driving mechanism and functioning parts such as spiked apron, comb and doffer are fully enclosed, reducing fire hazard and promoting cleanliness and safety.

The interior is designed for easy cleaning and is lighted. Operation is completely visible through Plexiglas windows. The comb is dynamically balanced for smoothness of operation.

W. D. Dodenhoff Co., Inc., Greenville, S. C., and Maywood, N. J.

For additional data request item K-226, using business reply card on page 205.



Cotton Bale Trailer

Ruggedly constructed of welded steel throughout, this cotton bale trailer has four-wheel steering, permitting trucks to "trail" when coupled together in a "train." Detachable coupler can be placed at either end, eliminating necessity for turning trailer around. Heavy duty demountable rubber-tired, roller bearing wheels roll easily and protect floors. Wheels 12" x 3½" are standard equipment with a total load rating of 4,800 lbs. For lower platform height, 10" x 3" wheels are available with total load rating of 4,000 lbs. Platforms are made in sizes required. Nutting Truck and Caster Co., Faribault, Minn. For additional data, request item K-261, using business reply card on page 205.

Southeastern Engineering Company

West Point, Georgia

November 6, 1948

Dear Sir:

Our organization specializes in waste reduction and waste control. Our service has been used by both large and small textile plants*, each of which will recommend it.

Savings can be made on both reworkable and salable waste.

We invite your inquiry for further information.

Sincerely,

Ben H. Crawford

P.S. Our invoices are payable only after our clients are completely satisfied with every phase of our work.

*Names on request.

Plastic beaded chain (Stekert).

Plastic Beaded Cord Chain Can Be Woven on Loom

Many interesting possibilities in the fields of weaving, braiding, stitching, applique, embroidery, and crocheting are opened up by the recent development of a Tenite plastic beaded cord chain which eliminates threading of beads. Tenite is a lustrous, lightweight plastic that will not chip or crack, and may be cleaned with soap and water. The beads, which are molded directly onto a rayon cord, become fused to the fibers so that they cannot slip off, even if the cord is severed, according to the announcement.

The chains are available in two diameter sizes—.115-inch and .130-inch—in single strands of red, yellow, pink, blue, brown, green, black, white, or combinations of any two of these colors. There is virtually no limit, however, to the shapes and colors in which these beads can be manufactured, it is claimed.

Besides their suitability for hand weaving, crocheting, and braiding, plastic beaded cord chain may also be woven on a mechanical loom. Beaded cloth produced in this manner offers a material for the manufacture of handbags, table place mats, and various specialty items.

Martin M. Stekert, 45 West 34th St., New York 1, N. Y.

For additional data, request item K-179, using business reply card on page 205.

Portable Swatch File

The Lane Portable Readi-Swatch Cabinet (Model 20) offers a means of filing yard size swatches for use in showroom sales or for filing seasonal samples. The cabinet employs the same swatch holders as are used in the large Lane model, and these can be used interchangeably.

The portable cabinet is all steel and is available in green, gray, walnut, or mahogany finishes. It is also equipped with a lock for the safe keeping of the swatches.

The Charles J. Lane Co., 46 West Broadway, New York, N. Y.

For additional data, request item K-246, using business reply card on page 205.

Heavy Duty Aluminum Doors for Industrial Application

A heavy duty industrial type aluminum semi-automatic door has two equal size, rectangular panels, fabricated from heavy structural aluminum angles and cover sheets .040" thick. The cover sheets are corrugated on 8" centers and backed up by two strong braces in each panel for extreme rigidity. Panels are joined together at the factory by a continuous piano type hinge. Recommended installations include warehouse doors, firewall doors, etc.

Aluminum door (Taylor).

L. S. Taylor Mfg. Co., 851 Marietta St., Atlanta, Ga.

For additional data, request item K-244, using business reply card on page 205.

Air Hose for Small Tools

A new air hose for small tools which weighs less than half as much and is stronger than the ordinary hose used in this service has been announced.

The hose is as flexible as a lamp cord because of its light weight and other construction features, the manufacturer claims. Its cover is an attractive red with high visibility.

Among advantages cited for the new product are that it allows easier handling—the tremendous decrease in weight making the tool line easier to move, it can be more efficiently used in close quarters and in pulling around corners, and kinks far less than the hose of ordinary design.

The new hose in the ¼-inch size weighs only 8.8 pounds per 100 feet.

B. F. Goodrich Co., Akron, Ohio.

For additional data, request item K-248, using business reply card on page 205.

Unit Heater for Textile Mills

A new textile unit heater is offered as an efficient answer to the requirement for a unit heater that can maintain its heat transfer capacity under adverse operating conditions in textile mills with a minimum of cleaning maintenance.

Heat transfer surfaces of a new design and having smooth contours are utilized in the "Textile Thermoiler." Removing lint, fly and dust from this new unit heater requires only a jet of air from a compressed air hose or from a portable electric hand blower and takes but a few minutes, it is claimed. A high vol-

Unit heater (Grinnell).

Do you have a plant in the South?

Do you package for resale?

Do you package for shipping?

APACO DISPLAY AT SOUTHERN TEXTILE EXPOSITION, GREENVILLE, S. C.

APACO CAN IMPROVE YOUR PACKAGING PICTURE

Call, Write, Wire Our Design Department. Do it TODAY!

ATLANTA PAPER COMPANY

Corrugated textile shipping cases • Display folding cartons • Printed papers, cellophane • Textile specialties

ATLANTA 2, GEORGIA

ume of air delivery provides a partial self-cleaning action.

The heater is offered in one size with a heating rate of 113,700 Btu per hour using steam at 2 lbs. pressure and entering air at 60°F. With steam at 25 lbs. pressure, this same unit delivers 143,400 Btu per hour. Any steam pressure up to 125 lbs. can be used with corresponding increases in the heat transfer capacity. The unit incorporates U-tube construction and the patented cooling leg.

Grinnell Co., Inc., Providence, R. I.

For additional data, request item K-122, using business reply card on page 205.

New Sanitizing Material Controls Algae and Slime

A new, quaternary ammonium type of liquid germicide-disinfectant designed for all-purpose sanitizing, and for control of algae and slime, is a recent development.

This material, Sanitizer No. 1, is designed for use where long-time sanitizing protection is desired, or for controlling slime and algae in recirculated water, stored water and humidifying equipment. Outstanding advantages said to be provided by this material are: (1) it is stable and may be stored for long periods without loss of germicidal efficiency; (2) it is non-corrosive, so that in recommended dilutions it is no more corrosive than water; (3) it is safe to use on metal and rubber surfaces; (4) recommended solutions of this material are relatively non-toxic; and (5) it has wetting and penetrating action and its surface-tension lowering properties enable it to penetrate all crevices of equipment.

Oakite Sanitizer No. 1. The manufacturers state that the product is especially effective when used for controlling slime and algae in textile mill humidifying equipment.

Oakite Products, Inc., 22 Thames St., New York 6, N. Y.

For additional data, request item K-153 using business reply card on page 205.

Fluorescent Fixture of Two-Piece Design

A fluorescent fixture featuring easy installation and maintenance was placed on the market recently. Designated the "Guth-Lite," the fixture consists of two basic parts, the channel and reflector assembly.

The weight of the channel is only 10 pounds, therefore one man can easily mount it, according to the manufacturer. There are no accessories or wiring to get in the way. The separate reflector assembly includes lamps, lamp holders, starters, ballast, wiring, reflectors and louvres and is joined to the channel by a "jacknife" hinge.

A handy maintenance rod is provided for lowering the reflector assembly for cleaning and replacement of parts. The entire reflector assembly may be removed and washed at floor level, it is claimed.

The unit is available with two 40-watt or two 100-watt lamps.

The Edwin F. Guth Co., 2615 Washington Ave., St. Louis 3, Mo.

For additional data, request item K-121, using business reply card on page 205.

Houghton Chemicals

Cerfak 1300 is a non ionic unsaponifiable liquid detergent of the alkylene oxide adduct type. Color is pale straw; active ingredients, 85%. It is

Italian-Made Worsted Machinery, Continental System

A complete line of worsted machinery, continental system, as manufactured by S. A. Officina Meccanica Sant'Andrea Novara, Novara, Italy, is now available in this country. The line consists of intersecting gill boxes for the different pre-combing and after-combing passages of 2 to 6 heads per machine, mixing intersecting gill boxes, rubber intersecting gill boxes, drawing frames, and French and rectilinear combs. Shown here are pre-combing intersecting gill boxes and combs. Ernest L. Frankl Associates, 10 East 40th St., New York 16, N. Y. For additional data, request item K-264, using business reply card on page 205, and specify machines.

—LOOMS BIG

When "work" runs bad—when production is cut because of "pick-outs" and the percent of "seconds" is on the increase, look behind the looms. Lack of air for "blow-down" between beam doffs and during "scheduled cleaning" periods because of air compressor or vacuum pump failure often lowers quality and production. Correct lubricants best assure unfailing performance.

A long history of satisfactory performance lies behind the use of RUBILENE OIL for the lubrication of textile mill auxiliary equipment. Its fine qualities make it first choice for this important job of lubricating heavy-duty air compressors and vacuum pumps. Let us advise you on the correct grades of RUBILENE for your specific installations.

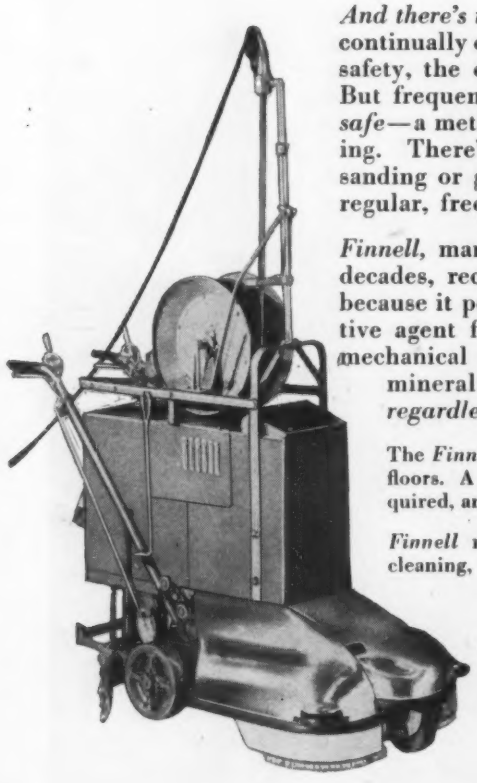
SINCLAIR

. BEHIND THE LOOMS

TEXTILE LUBRICANTS

FOR FULL INFORMATION OR LUBRICATION COUNSEL WRITE SINCLAIR REFINING COMPANY, 630 FIFTH AVE., NEW YORK 20, N.Y.

There's No Substitute for It!



And there's no substitute for wet-scrubbing oily wood floors! Where oil drops continually on floors, as in textile mills, *frequent cleaning is essential.* Worker safety, the elimination of fire hazards, and good housekeeping require it. But frequent cleaning calls for care in selecting the method. It should be *safe*—a method that won't injure floors regardless of the frequency of cleaning. There's a time and a place for occasional reconditioning of floors by sanding or grinding down the floor surface, but that is no substitute for a regular, frequent cleaning schedule as required in textile mills.

Finnell, manufacturers of floor-maintenance equipment for more than four decades, recommends wet-scrubbing for cleaning oily wood floors. First, because it permits the use of a fast-acting mineral oil solvent, the most effective agent for emulsifying grimy oil and grease for speedy removal with mechanical equipment. Second, because wet-scrubbing with a fast-acting mineral oil solvent, such as *Finnell's Setol,* is *thoroughly* safe for floors *regardless of the frequency of cleaning.*

The *Finnell* illustrated at left is a *Self-Propelled Scrubber-Vacuum* for use on large-area floors. A complete cleaning unit *all in one,* it applies the cleanser, scrubs, rinses if required, and picks up. Has *silent* vacuum. Cleans up to 8,750 sq. ft. per hour!

Finnell makes equipment for dry-scrubbing as well as wet-scrubbing, and for dry-cleaning, waxing, and polishing; also a full line of *Cleansers, Sealers, Waxes, Steel-Wool Pads, Mop Trucks,* and other accessory equipment. And there's *a Finnell man nearby* to help train your maintenance operators in the proper use of *Finnell Equipment and Supplies.*

For consultation, demonstration, or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 1311 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

Everything FINNELL for Floor Care

FINNELL SYSTEM, INC.

Pioneers and Specialists in

FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES IN ALL PRINCIPAL CITIES

also a wetting and dispersing agent.

Surfax 1266 is a liquid wetting agent derived from non-ionic esters and alkyl aryl sulfonates. Color is reddish amber; active ingredients, 45%. This, too, is a rewetting agent and absorbency promoter.

Surfax 1288 is a liquid wetting agent of the aroyl sulfopropionate type. Color is amber; active ingredients, 35%. Product is also recommended as dispersing and dye leveling agent.

E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa.

For additional data, request item K-129, using business reply card on page 205, and specify product.

"Cloth Room Practices"

The popular series of articles "Cloth Room Practices," which appeared in the January, March and May 1948 issues of TEXTILE INDUSTRIES, has been reprinted by Curtis & Marble Machine Co. as a service to those interested in cloth room operations.

Curtis & Marble Machine Co., 72 Cambridge St., Worcester 3, Mass.

Use post card on page 205, requesting item K-206.

New Conditioning Cabinets

Two new conditioning cabinets have been placed on the market for use wherever hygroscopic materials are stored or processed.

Through the operating principle of molecular suspension, highly saturated and tempered humid air is blown from either side at alternating periods of 30 seconds, thus giving all materials an even regain. All danger of over-saturation is eliminated, according to the manufacturer, since only natural regain is absorbed.

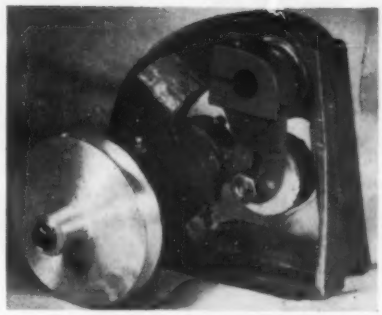
Conditioning chambers of any size can be provided by the manufacturer. Timers for regulating conditioning periods can be supplied.

The three classifications of cabinets now being manufactured are: Type No. 1, complete with humidity control only; Type No. 2, complete with humidity and heating controls; Type No. 3, complete with humidity, heating and refrigeration for absolute control of temperature.

Humidaire Inc., 300 Preakness Ave., Paterson 2, N. J.

For additional data, request item K-207, using business reply card on page 205, and specify equipment.

Conditioning cabinet (Humidaire).



Doffer comb drive (Cox).

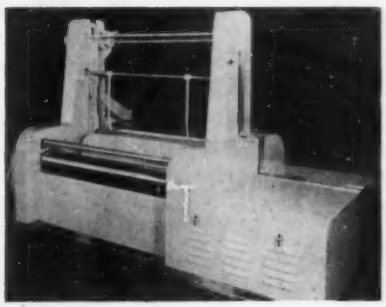
Pneumatic Cut-off Winder

Under a streamlined steel cover is a new Simpson cloth winder. This improved winder is equipped with pneumatic cut-off and an automatic slitter. The cloth can be cut and the next roll begun all in one automatic operation. This winder saves refinishing of up to 50 yards of cloth that normally is spoiled in completing one roll and beginning another, according to the manufacturer. Savings are also claimed with regard to time and the strain of heavy lifting.

H. W. Butterworth & Sons Co., Philadelphia 25, Pa.

For additional data, request item K-216, using business reply card on page 205.

Simpson cloth winder (Butterworth).



Doffer Comb Drive

A new type of doffer comb drive, designated the "K & R Doffer Comb Drive," is being manufactured.

Simplicity of design, operation, and maintenance is the outstanding feature claimed for the device. According to the manufacturer, all five of the bearings can be replaced with a minimum of effort by personnel in the mill. Also, the bearings are of standard design and therefore can be easily procured.

Other features claimed for the unit include:

(1) A comb stroke adjustment which allows not only the lowering and raising of the comb position but permits the increase or decrease of the length of the comb stroke to compensate for weather conditions or characteristics of the fibers being processed. This adjustment also permits a lower comb speed by using the stroke modification to accomplish the desired result.

(2) A positive locking arrangement which eliminates comb slippage and insures a positive and permanent positioning of the comb without the use of set screws. And effective locking is insured even though the comb shaft may be worn or previously scarred by the use of a set screw.

(3) Every moving part of the comb drive is supported on a ball bearing.

Cox Foundry & Machine Co., 985 Cox Ave., S. W., Atlanta, Ga.

For additional data, request item K-222, using business reply card on page 205.

Shuttle Improvements

A low thread groove shuttle which is said to eliminate the hazards of jerk-ins, smutted, and rubbed filling has been developed. This shuttle carries the filling thread down below the point of contact between the shuttle and the binder leather. It also lowers the thread below the feeler slots to eliminate the possibility of the thread catching on the feeler as it enters and leaves the shuttle.

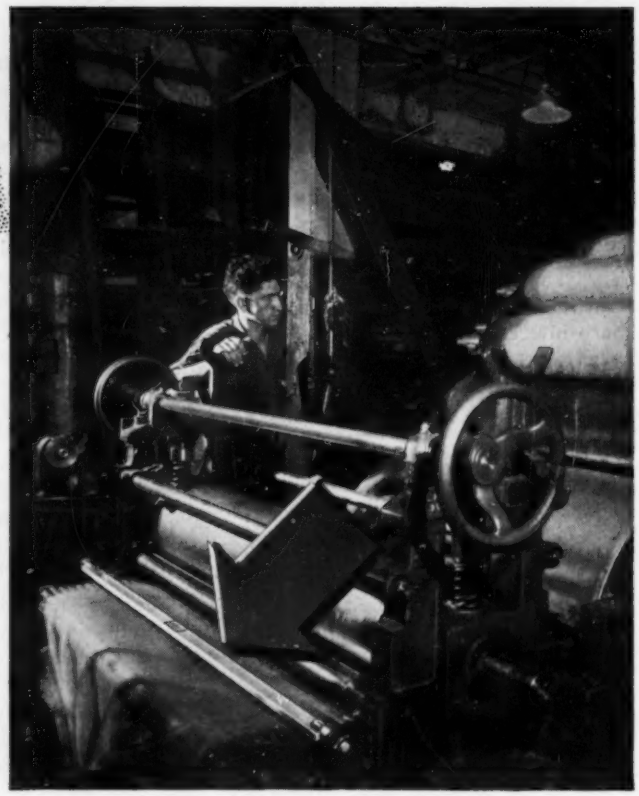
Also designed for cotton weaving is the CI-41 shuttle eye with the inner hook and outside lock which permits quick threading and keeps the thread constantly in place.

Watson-Williams Mfg. Co., Millbury, Mass.

For additional data, request item K-221, using business reply card on page 205, and specify product.

SPOILAGE CUT 50%— PRODUCTION UP 10% *DUE TO IONOTRONS!*

An example of how textile static problems are being solved with the Ionotron Static Eliminator®



Arrow shows location of Ionotron Static Eliminator on Peralta of wool card at Broadalbin Knitting Company. The Ionotron has entirely eliminated wool web static troubles.

At the Broadalbin Knitting Company, Broadalbin, N. Y., static electricity used to cause frequent breakage of wool web — with resultant spoilage, machine stoppages, and excess operating time. In February, 1947, Broadalbin installed Ionotron Static Eliminators on two wool cards where the web is fed from breaker to finisher.

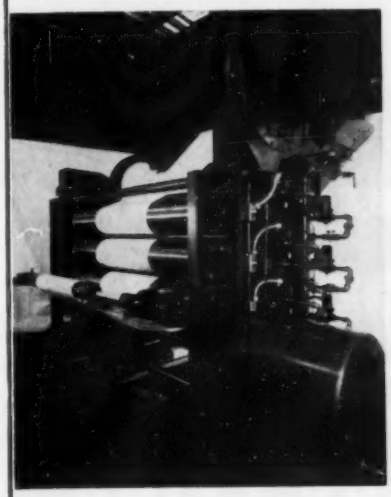
R. H. Cleveland, Superintendent, reports these results: approximately *50% less spoilage; 10% more production; 10% reduction in operating time; better quality work.* Static-caused stoppages of the machines have been eliminated entirely. Needless to say, Broadalbin is planning to install Ionotrons on other machines.

How it works — The Ionotron contains a self-active source of continuous alpha radiation. This ionizes the air in the static trouble zone. The ionized air conducts the static harmlessly to ground. The reduction of static eliminates bunching, lapping, and other static-caused difficulties with textile fibres and fabrics. Production and product quality go up. Working conditions are more comfortable, because high humidity is no longer required to combat static. Action of the Ionotron is continuous and permanent. There are no moving parts, no power requirement, no operating cost!

New bulletin tells all — Various applications of Ionotrons to textile machinery are illustrated and described in a new booklet entitled "Industrial Applications of the Ionotron Static Eliminator." You're welcome to a copy. Please address *Dept. S-6, United States Radium Corporation, 535 Pearl St., New York 7, N. Y.* Write today!

U·S RADIUM

IONOTRON *Static* ELIMINATOR



Nylon Heat Treating Machine

This nylon heat treating machine is equipped with six internally heated cylinders. Each cylinder is provided with an individual gas burner, automatically controlled as far as temperature is concerned. The heat from the gas burner is transferred to a core of internally agitated Dowtherm which is reported to maintain a remarkable degree of temperature uniformity over the entire surface of each roll. Unit is equipped complete with burners, controls, blowers, exhaust unit, and roll drive and is shipped as a completely assembled unit. The National Drying Machinery Co., Hancock St. and Lehigh Ave., Philadelphia 33, Pa. For additional data, request item K-260, using business reply card on page 205.

Synthetic Enamel for Industrial Painting

A new line of synthetic enamels is being marketed under the name Lustral "67". Lustral "67" is intended primarily for interior use, although it may be used satisfactorily for some types of exterior service.

The new synthetic is recommended for general industrial painting, product finishing and maintenance work. It is suitable for brushing, spraying or dipping and may be either air-dried or baked.

The color range of the new line includes 21 colors in addition to gloss white, semi-gloss white, and black. Lustral "67" is packaged in one gallons, five gallons, and drums.

Reinstatement of the complete line of Kem Lustral industrial enamels has also been announced. This line of synthetic enamel is available in 24 colors, including black, gloss white and semi-gloss white.

The product is reported equally well suited to wood or metal and to exterior or interior use. Because of recent advancements in synthetic resin research, the new improved formula provides greater hiding, better flow and higher gloss, according to the manufacturer.

The Sherwin-Williams Co., Industrial Division, Cleveland 1, Ohio.

For additional data, request item K-164, using business reply card on page 205.

Textile Trucks

Made for roving, filling, lap, battery filling waste, yarn, and utility handling of textiles, a specialty line of trucks is available. Of functional design, the trucks include construction of vulcanized fiber, galvanized steel, aluminum, and cured oak with steel reinforcements. Special installations are built to detailed specifications from the textile mills, and engineering research is furnished when requested.

Fisher Manufacturing Company, Hartwell, Georgia.

For additional data, request item K-184, using business reply card on page 205.

Braider Take-up and Let-off

An improved braider take-up and let-off is equipped with special gears having cut teeth of fine pitch for smooth drive and uniform tension. Gears on both sides give equalized, uniform drive, and wide spacing between gears reduces tilting of rolls and assures more constant tension.

A composition covered roll for use when braiding thin braids of rayon and synthetic yarns has also been developed.

New England Butt Company, 304 Pearl Street, Providence 7, R. I.

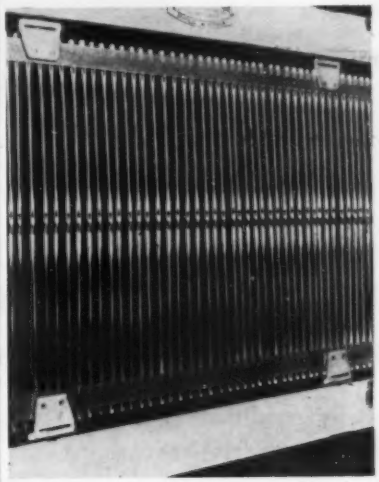
For additional data, request item K-185, using business reply card on page 205.

Broaching Machine

The broaching of fluted rolls for textile use is now possible with a special push-type horizontal broaching machine which pushes the roll through a set of dies.

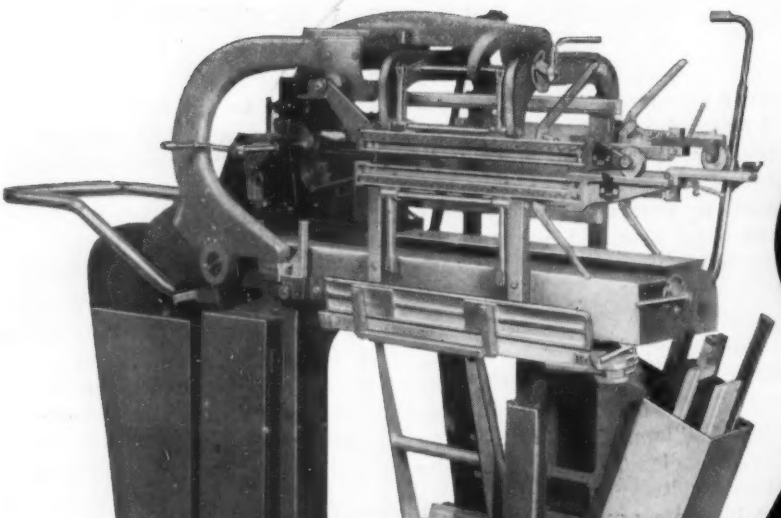
The roll is finished ground on all diameters, but the diameter on which the flutes are to be cut need not be of final smoothness. This method of broaching fluted rolls cuts all the flutes on all diameters in one pass of the roll through the broaching die. At the end of each stroke of the machine, a completed roll is produced.

The common practice of making the flutes' spacing slightly dissimilar in order to avoid the formation of serrations on the top rolls can be readily taken care of in the broaching process by making the dies in the desired form. The production on



Drawtex Harness

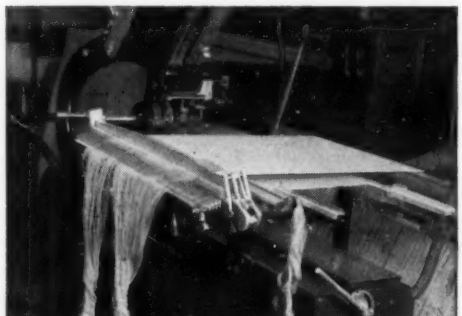
A close-up view of the recently announced Drawtex harness designed for smooth operation with the Barber-Colman drawing-in machine. The flexibility of the tempered flat steel heddle permits the eye to be easily turned for insertion of the drawing-in needle without harming the heddle. Because of this flexibility, any individual heddle can be quickly put on or taken off the bar by simply twisting the end on the bar. By turning a convenient key, the heddle bar can be adjusted for good weaving. Heddles can be quickly removed from the frame by unlocking the tensioned spring wire hooks and pushing the rod to one side. The rod hooks and heddle rods unlock automatically. Steel Heddle Mfg. Co., 2100 W. Allegheny Ave., Philadelphia 32, Pa. For additional data, request item K-257, using business reply card on page 205.



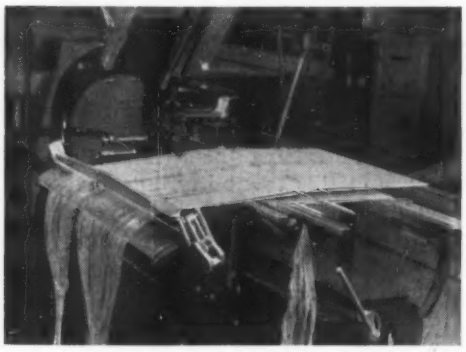
BARBER-COLMAN MODEL "LL" *Portable* WARP TYING MACHINE

THIS "UNIVERSAL" MACHINE TIES IN EITHER PLAIN OR LEASED WARPS WITH EQUAL SPEED AND EFFICIENCY

Under the conditions of modern styling, many mills need versatile equipment to handle frequent changeovers between filament and spun synthetic yarns. The Barber-Colman Model "LL" Portable Warp Tying Machine is extremely useful under such conditions because of its adaptability. It is a combination machine, with interchangeable selector mechanisms to select from either an end and end lease or a flat sheet. A trained operator can make the necessary changes in less than ten minutes. The production rate when tying from an end and end lease is the same as when tying from a flat sheet. Under average conditions, a good operator can tie up to 4000 ends an hour, or better. This machine is particularly valuable in mills where both flat and end and end leased warps are coming through, and where the use of separate machines is not justified as they would not be utilized to their fullest capacity.



Barber-Colman Model "LL" Portable Warp Tying Machine set up to tie in new warp from a flat sheet.



The same machine as above, but now loaded for tying-in leased warps, as shown by the lease rods.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND

this broaching machine is reported to be 120 completed fluted rolls per hour, based on 85 per cent efficiency.

The Lapointe Machine Tool Company, Hudson, Mass.

For additional data, request item K-186, using business reply card on page 205.

Water Repellent Finish

Permel Resin is a durable water repellent compounded to give maximum repellency, both initially and after prolonged laundering and dry cleaning.

A durable spot resistance and wrinkle resistance is said to be imparted to rayons when this finish is used with resins imparting crease resistance. The spot and crease resistance is accomplished in a single bath using regular equipment.

Wool treated with Permel Resin has increased water repellency. This water repellency usually cannot be measured by the normal AATCC spray test, it is said. An absorption test, such as the Quartermaster Corps dynamic absorption test, must be used in many cases to determine the repellency imparted to wool.

There is no odor in the bath and practically none during curing, it is claimed.

American Cyanamid Company, Bound Brook, N. J.

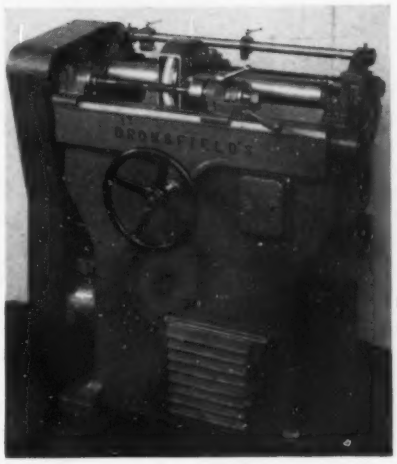
For additional data, request item K-188, using business reply card on page 205.

Dronsfield Machines for Roller Maintenance

The Pushing-on Machine No. 227 has been designed for mounting rubber and other synthetic cots on all types of cotton spinning rollers. The machine consists of an air headstock, an adjustable "V" trough to hold the cot, and a pusher bar operated by hand. Underneath in a totally enclosed compartment is an air compressor unit with motor, which is coupled to the air headstock by a pipe.

The operation is performed by pushing the roller into the cot, which is expanded by air pressure, thus allowing a free movement until the cot is in position on the roller. Special bushings are supplied with the correct bore of hole for each diameter of roller, to insure sufficient pressure of air entering the cot.

Grinding Machine No. 218 has been designed to grind spinning rollers covered with leather, cork, rubber, or any synthetic material to a high degree of accuracy, and it gives



Roll grinder (Dronsfield).

a perfect finish to the surface of the rollers, according to the makers. This machine, which is for grinding and varnishing comber and drawing frame rollers, is also useful for grinding all types of spinning rollers used in the mill. Partially worn rollers may be trued up with the machine and the life of the covering considerably increased, it was stated in the announcement.

The machine will accommodate rollers up to 18 inches in length. The length of traverse of the grinding wheel is controlled by two adjustable stops on the top cross shaft. A positive gear-operated reversing mechanism is incorporated into the machine. Motors, starters, and dust fan are built in the machine, which was designed for electric drive and cannot be supplied for belt drive.

Dronsfield Brothers Limited, Atlas Works, Oldham, England.

For additional data, request item K-189, using business reply card on page 205, and specify machine.

Fabric Inspection Machine

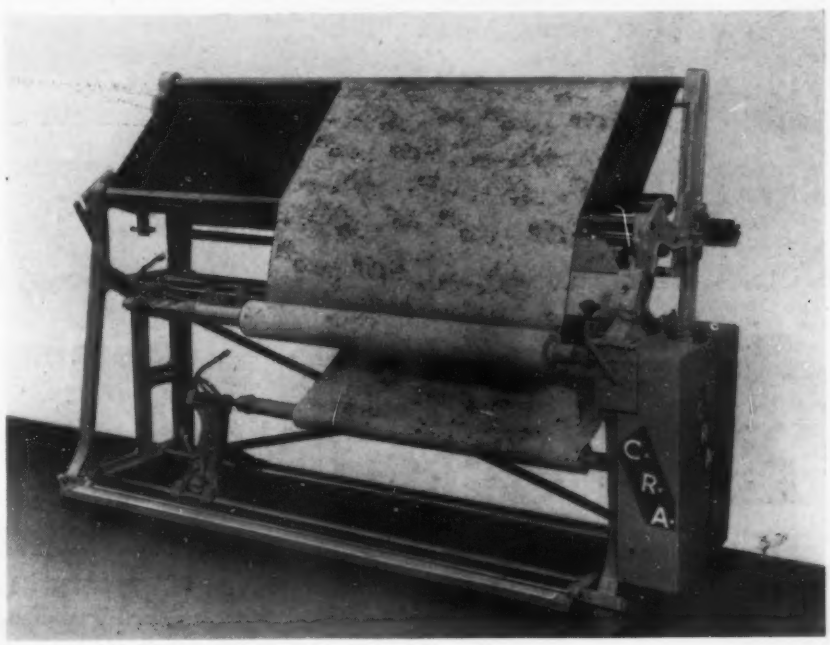
A new measuring and inspecting machine which provides a simple and accurate check on the yardage and perfection of piece goods is now in production. The machine is designed so that the operator can scan the entire piece of goods at one time, accurately and comfortably.

A tube release permits the operator to set the piece goods on the machine easily. He simply pulls a lever back, sets the goods on the machine, and releases the lever. For the varying widths of material that may be inspected, an arm release is provided for easy shifting of the cones to hold the fabrics.

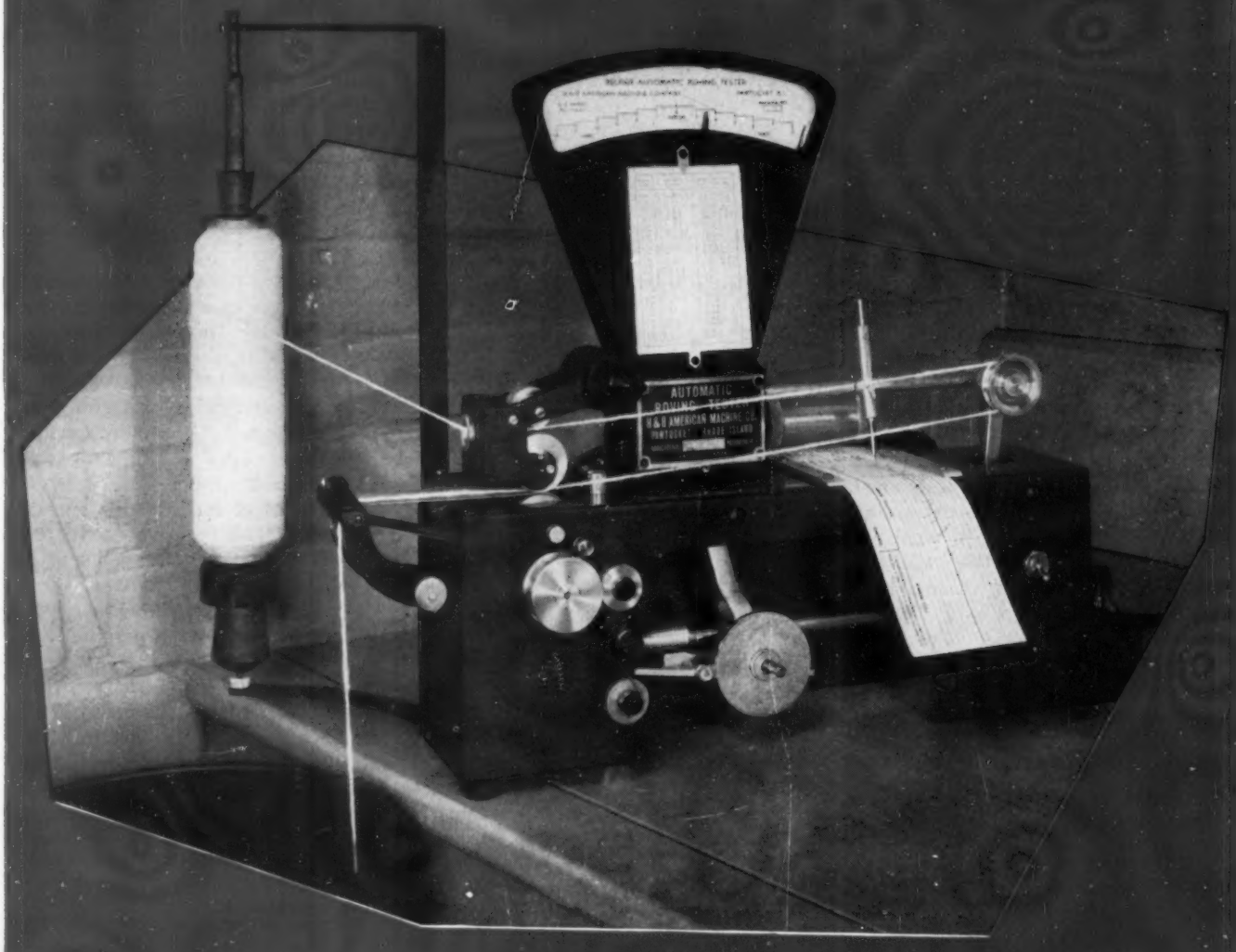
A foot control for variable speeds is provided. This feature permits the operator to handle the material as it is unwound.

The measuring machine has a forward and reverse drive mounted on a single control, and it is set into motion by a switch. An accurate yardage meter counts the material in one-eighth yards and is mounted for quick visibility. A folding attachment can be provided for doubling open rolled goods, as well as for opening doubled folded fabrics. For short

Fabric measuring and inspecting machine (CRA).



H & B AUTOMATIC



We, at H & B, have long been proud of our efforts toward perfection in even the smallest details of textile machinery manufacture. We have stressed the importance of the "little things" done in the right way from the beginning. We believe this emphasis has resulted in superior machinery to do your work. Now we want to mention a *little* machine which you can use to make a *big* difference in your production.

H & B AMERICAN

Builders of Modern

FACTORY, EXECUTIVE OFFICES AND EXPORT

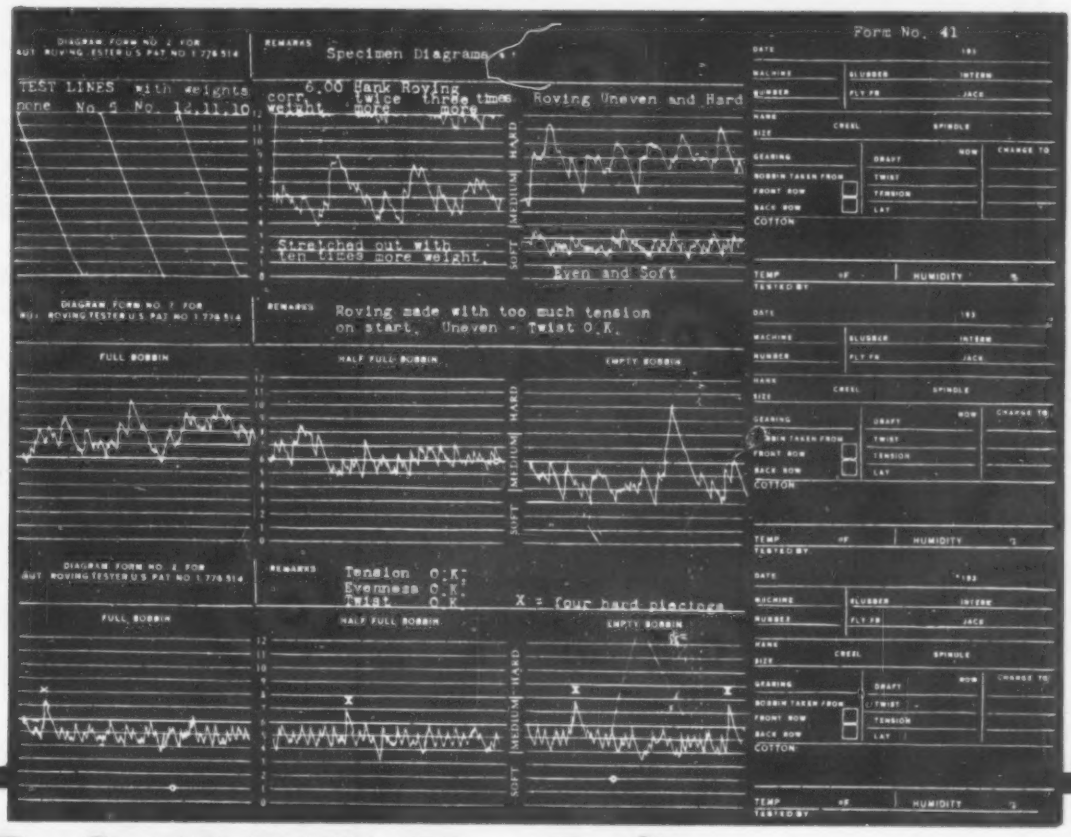
ROVING TESTER...

IT'S THE LITTLE THINGS *that make a Big Difference*

This machine is used to obtain an impartial record of the physical condition of your roving. From this record roving is judged for tension, evenness and twist. A short explanation of how the tester functions helps make its value clear. Weights on the balance scale stretch the roving being tested as much as the draft between the intake and delivery rollers. When a roving is hard the diagram, as shown here, is marked between lines 8 and 12, when soft between lines 0 and 4. Perfect roving keeps the pen at the heavy 6 line of the diagram.

With a little experience the tester operator recognizes faulty roving and what the faults are. Then, when diagrams are made from every Slubber, Intermediate, Fly and Jack Frame in the mill, you are ready to adjust your frames to produce the kind of roving you want.

The H & B Automatic Roving Tester is the only mechanical device to impartially test roving. It eliminates the possibility of error through bad judgment. Here is a little thing designed to make a big difference in your production.



MACHINE CO.

Textile Machinery

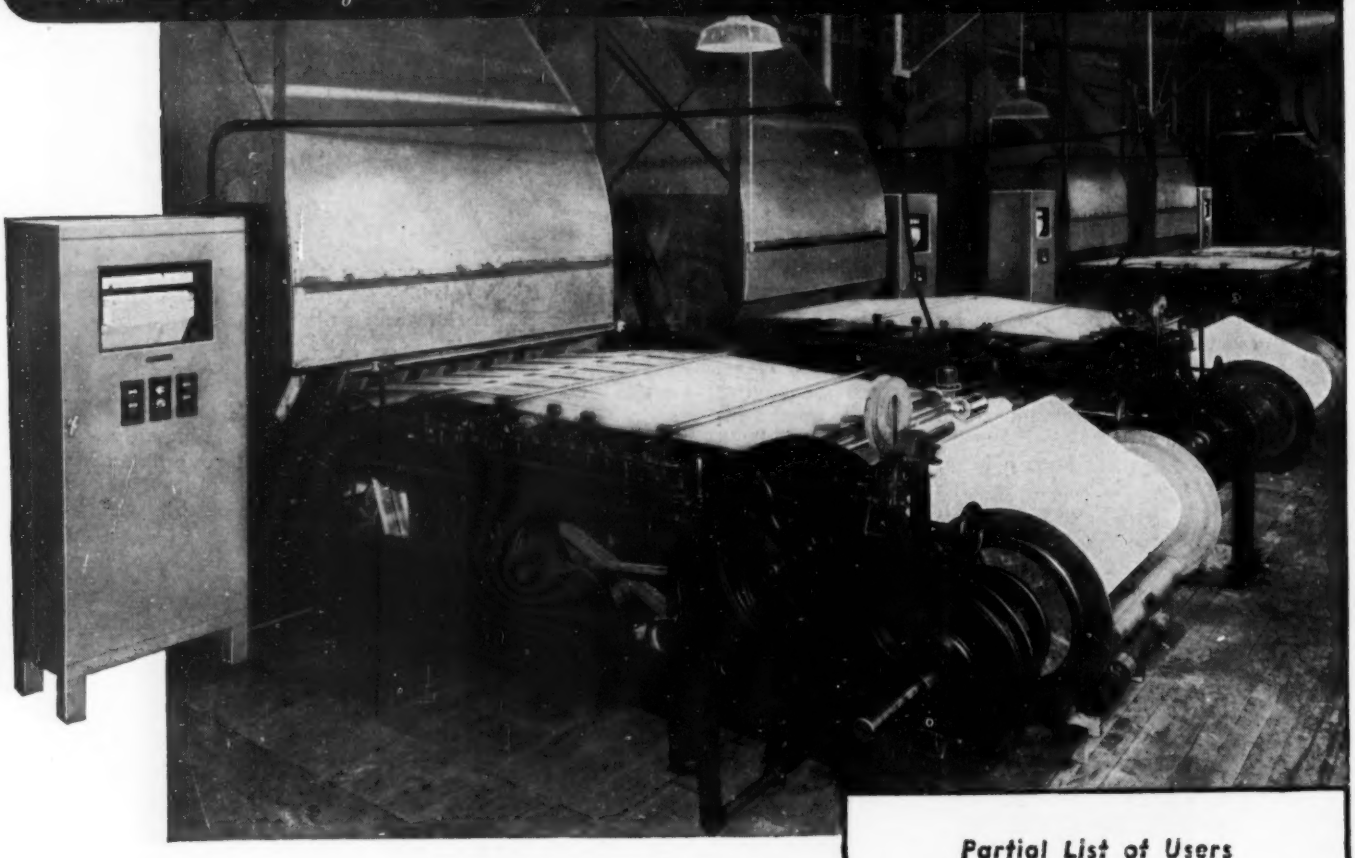
DIVISION PAWTUCKET, RHODE ISLAND, U. S. A.

BRANCH OFFICES

ATLANTA, GA.
815 CITIZENS AND SOUTHERN NATIONAL BANK BUILDING

CHARLOTTE, N. C.
1201 JOHNSTON BUILDING

OVER 400 IN USE TODAY



Performance Counts!

On over 400 cotton and rayon slashers throughout the United States and Canada, superior warps are being delivered to the weave room because of the Brown Moist-O-Graph Slasher Control System.

The Moist-O-Graph increases slasher and weave room production. It cuts down broken ends because warps are never too *dry*. It eliminates mildew because warps are never too *wet*.

Consider the number of looms in your mill service by one slasher, and you will see the multiplying economies over 400 slashers are *now* giving with the Brown Moist-O-Graph. Write for Catalog No. 9305 entitled "CONTROL INSTRUMENTS for TEXTILE PROCESSES".

THE BROWN INSTRUMENT CO., 4492 WAYNE AVE., PHILADELPHIA 44, PA.
DIVISION OF MINNEAPOLIS-HONEYWELL REGULATOR CO.
Offices in principal cities of the United States, Canada and throughout the world.

Partial List of Users

American Enka Corporation
Ashland Corporation
Associated Textiles of Canada
Beaumont Mfg. Company
Bemis Bros. Bag Company
Berkshire Fine Spinning Associates
Bibb Mfg. Company
Brookside Mills
Callaway Mills
Canadian Celanese
Classe Ribbon Works, Inc.
Consolidated Textiles, Ltd.
Continental Mills
Courtaulds, Ltd.
Drayton Mills
Esmond Mills
Graniteville Co.
Henderson Cotton Mills
Millville Mfg. Company
North American Rayon Corp.
Pacific Mills
Pepperell Mfg. Company
Riverside & Dan River Cotton Mills, Inc.
Seminole Mills
Springs Cotton Mills
Swift Mfg. Company
West Point Mfg. Company
York Mfg. Company

BROWN MOIST-O-GRAPH

lengths, a drop-in basket can be provided to eliminate one operation and speed the measuring process.

The machine handles all types of material and winds, from the tube, reel, board, etc. It is made up in two standard widths, 48 and 60 inches. Machines can be made up in any width required, to the specifications of the customer.

Cutting Room Appliances Corp., 45 West 25th St., New York 10, N. Y.

For additional data, request item K-114, using business reply card on page 205.

Rohm & Haas Chemicals

Rhozyme LA is a new liquid diastatic enzyme concentrate designed specifically for textile desizing operations. This new product combines a liquid enzyme with unusual desizing efficiency and stability to high temperatures, affording thorough and uniform and rapid desizing.

Rhoplex WN-66 is an aqueous dispersion of an acrylic type resin for textile finishing. This product is designed to impart a firm, full handle to textile fabrics. It is supplied in the non-ionic form and is compatible with a wide range of acids, bases, electrolytes, and other commonly used textile finishing materials, such as cationic softeners and urea and melamine resins, giving a flexibility in processing seldom found in materials of this type. Phoplex WN-66 is completely polymerized during manufacture and normal drying sets the resin on the fiber. This product is recommended in textile finishing where a medium hard, firm, full handle is desired.

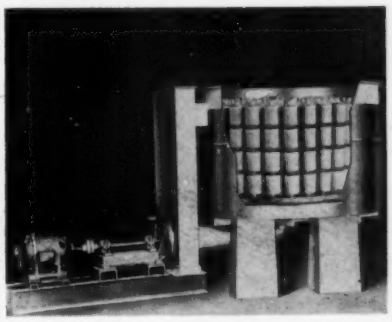
Rohm & Haas Co., Washington Square, Philadelphia 5, Pa.

For additional data, request item K-161, using business reply card on page 205, and specify product.

Steel Loom Cloth Rolls

A new line of cloth rolls is made from 2½" lightweight steel tubing. All parts are welded, the end washers being made of steel. Ends are rounded to prevent damage to the floor. Rolls are available with starting bars for cloth or sandroll covering. The A. & W. Machine Co., P. O. Box 111, Charlton City, Mass. For additional data, request item K-265, using business reply card on page 205.

Worsted Package Dyeing Machine



This Model NUAKO worsted package dyeing machine is said to produce evenly dyed yarns with characteristics of natural yarn. Positive flow of dye liquor at temperatures near the boiling point is assured. An exclusive feature claimed is the ability to operate a series of machines as one unit, or each machine independently providing the dyer with a versatile production tool. Standard Fabricators, Inc., 355 Walton Ave., New York, N. Y. For additional data, request item K-256, using business reply card on page 205.

Centralized Lubrication Equipment by Lincoln

The new Type SL-3 lubricant injectors are small, compact, space-saving units especially designed for use where mounting space is limited. These injectors have only two moving parts, the valve stem and piston. They are available singly or in manifolds of two, three or four injectors.

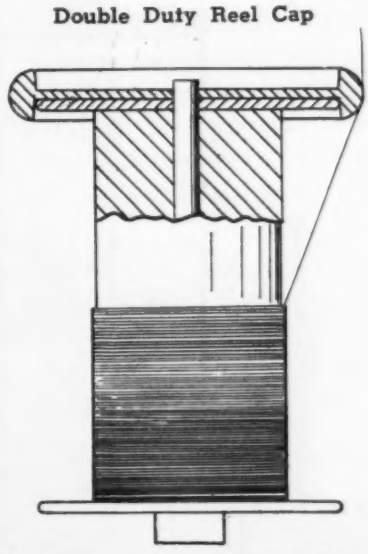
Base blocks are drilled so that injectors can be mounted either vertically or in horizontal position on machines. Injectors can be individually set so that the exact amount of lubricant required is delivered to each bearing. Discharge of injectors is by positive displacement for maximum accuracy. The knurled adjusting knob may be turned to a desired setting by hand, and a spring clip-lock prevents any change in setting that might result from machine vibration.

Each injector block has a ⅛" I.P.T. female connection at each end. Outlet of each injector is ⅛" O.D. tube. Injectors are adjustable to maximum lubricant output of .004 ounces per cycle.

The Model 1825 lubricant pump is an automatic, air-motor powered unit which may be operated to cycle the centralized lubrication system at predetermined intervals by moving the control handle to "start" position. After lubrication cycle is completed, the control handle is automatically returned to "Off" position by a vent valve. Pumping unit is totally enclosed and located beneath the lubricant container. A follower plate is furnished to facilitate pumping of lubricants that tend to "channel." Container has a lubricant capacity of 60 lbs.; pressure ratio, 70 to 1; standard factory setting of vent valve, 2500 P.S.I.

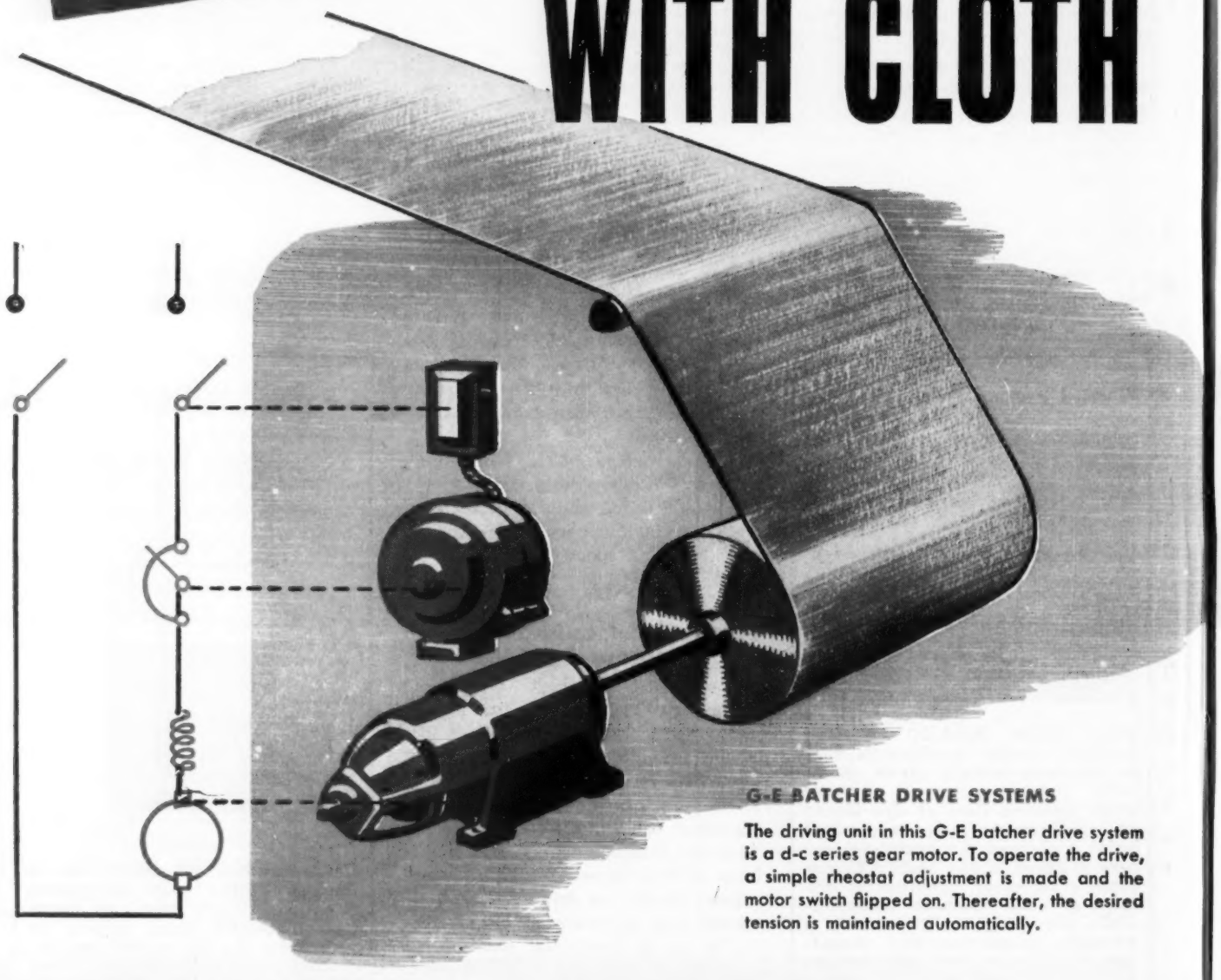
A new surface check grease fitting permits standardization on one,

Double Duty Reel Cap



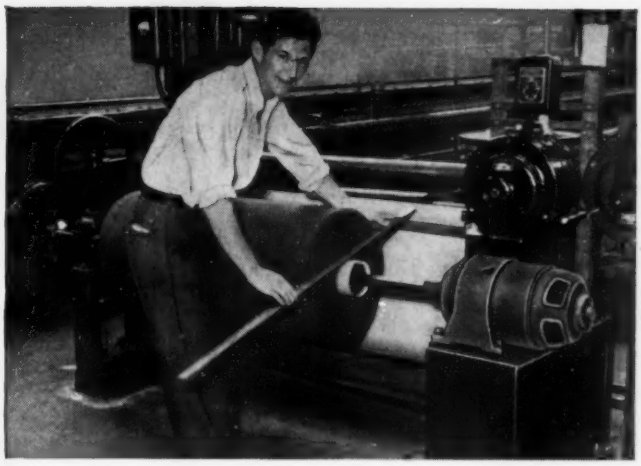
Designed so that either side of the cap fits the top of the bobbin, this double duty reel cap keeps foreign matter from getting on yarn from the top of the cap, according to the manufacturer. WAK Industries, P. O. Box 3095, Charlotte 3, N. C. For additional data, request item K-254, using business reply card on page 205.

Smooth Batching WITH CLOTH

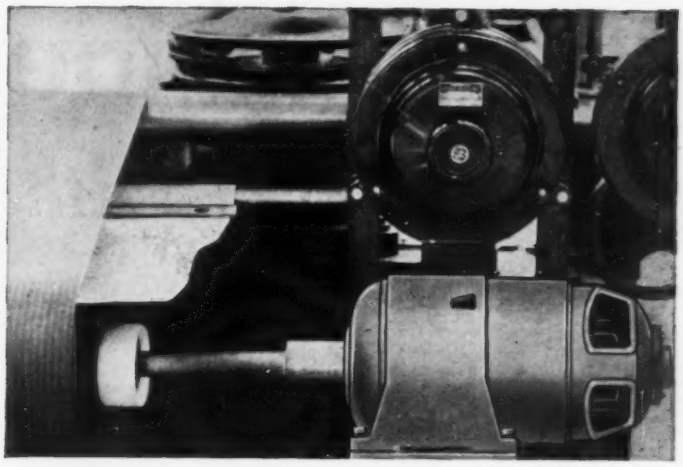


G-E BATCHER DRIVE SYSTEMS

The driving unit in this G-E batcher drive system is a d-c series gear motor. To operate the drive, a simple rheostat adjustment is made and the motor switch flipped on. Thereafter, the desired tension is maintained automatically.



This photograph dramatically illustrates how a G-E series motor batcher drive winds cloth into smooth, uniform rolls with even ends.



Simplicity is the outstanding advantage of a G-E series motor batcher drive. It consists of a d-c gear motor, rheostat, and motor control.

TENSION HELD CLOSELY!

A G-E series batcher drive needs only one simple adjustment to produce uniform cloth pull throughout a winding operation. Rolls are smooth and even, dyeing is better, and finishing costs are lower.

By holding cloth tension within narrow limits as it leaves a finishing machine, a G-E batcher drive prevents stretching of the warp—assures the operator of a uniform thread count over the roll length. Inner layers of cloth are not crushed and wrinkles and hard spots are eliminated. Thus, dyeing and other finishing operations are improved with less chance of shading and incomplete absorption.

SPOILAGE IS REDUCED!

Cloth rolls wound by a G-E batcher drive have smooth, even ends. Scuffing of the cloth during handling is avoided. The steady pull of the drive during acceleration and deceleration eliminates the "grabbing" motions of friction devices that often damage the cloth.

Little maintenance is required for a G-E batcher drive. There are no friction parts to wear out. Once a tension setting is made at the start of a wind, the drive automatically maintains this value without the aid of any mechanical adjusting device.

A DRIVE FOR ANY BATCHING CONDITION!

General Electric is prepared to furnish batcher drives to meet practically any set of operating conditions. The most widely used drive, a G-E series batcher motor, can operate over a diameter buildup range of 8 to 1 and a tension range of 4 to 1 at constant speed in yards per minute. Alternate drives are also available where greater accuracy of tension control, wide speed range, or "tensionless" winding are required. For a complete description of G-E batcher drives, write for Bulletin GEA-5012B. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

DRIVE SYSTEMS FOR TEXTILE MILLS

GENERAL ELECTRIC

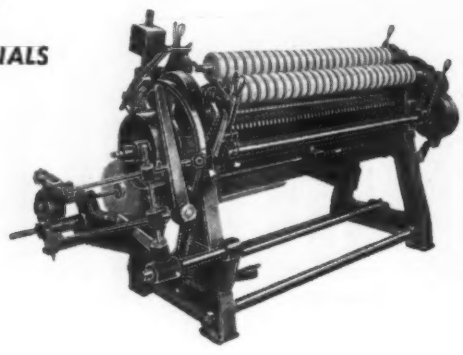
661-29

Camachines

. . . for men with ideas

With more than twenty different models for the textile industries to choose from, Camachines offer a practical answer to every slitting and roll-winding problem. Illustrated below are four typical Camachines for men with ideas about increased production, improved quality and lower costs . . .

TACKY MATERIALS

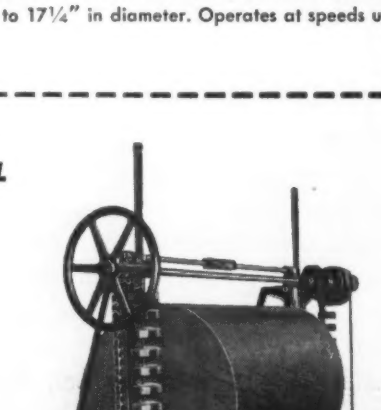


CAMACHINE 26-3A is especially designed for handling tacky or unevenly coated materials, such as adhesive tapes. Machine widths 26" to 56". Accommodates a 32" diameter mill roll. Rewinds rolls as narrow as ½", or up to 17¼" in diameter. Operates at speeds up to 400 fpm.

BIAS BINDING

CAMACHINE 40-3L is the ideal machine for converting straight and bias binding fabrics (also specialty fabric) into strip in rolls. Machine widths 26" to 56". Accommodates material from roll, piece or fold. Rewinds rolls as narrow as ½", or up to 22" diameter. Speed up to 150 fpm from fold; higher from roll.

LOW MODEL WINDER



CAMACHINE 44-W low model winder operates in conjunction with processing machines as in bleacheries, fabric printing plants and bag factories. Available in machine widths from 32" to 82". Produces firm, uniformly rewound rolls up to 36" in diameter at speeds up to 1000 fpm.

BANDAGE ROLLS

CAMACHINE 40-4B, a semi-automatic machine for fast production of gauze bandage rolls. Machine widths 42" to 50". Accommodates 24" diameter mill roll. Rewinds rolls as narrow as ½", or up to 12" diameter. Machines come equipped with automatic stop for producing rolls of predetermined length.

Cameron Machine Company, 61 Poplar St., Brooklyn 2, N. Y.

WRITE FOR LITERATURE

AA—188

Camachines

FOR FAST, TOP QUALITY ROLL PRODUCTION

. . . the world over

all-purpose fitting. It can be securely contacted by all commercial hydraulic couplers, it is claimed.

Outstanding features cited include: ball-in-head; sturdier construction; special spring design; and larger grease passage.

Lincoln Engineering Company, 5701 Natural Bridge Ave., St. Louis 20, Mo.

For additional data, request item K-140, using business reply card on page 205, and specify product.

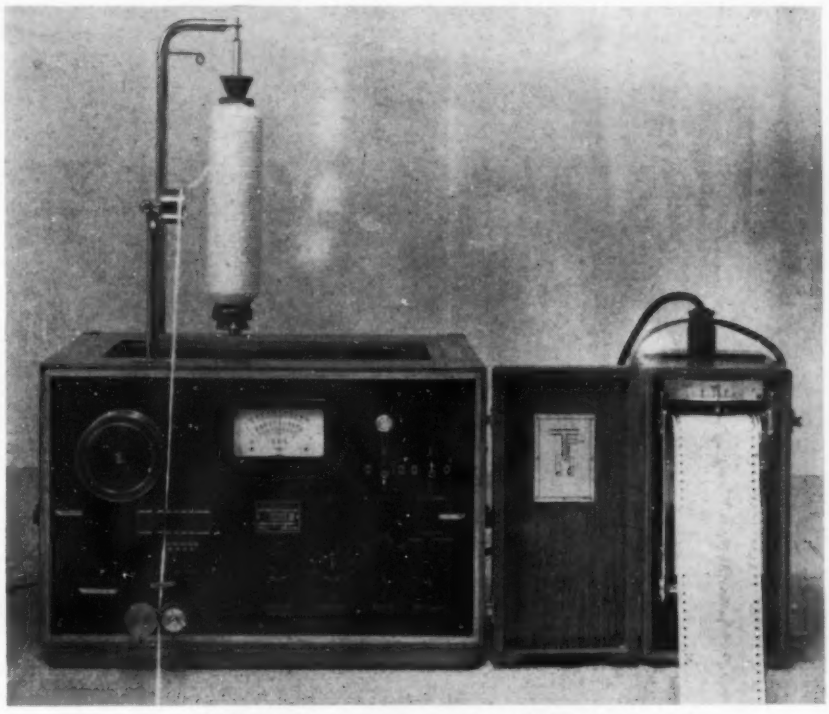
New Line of Swiss Machines for Warp Preparation

The following machines and testing apparatus as manufactured by Zellweger Ltd., Uster-Zurich, Switzerland, were made available in this country this year:

A warp tying machine, designated the "Little Uster," is designed for mechanical warp tying directly on the loom. It is easily transportable and can be adapted to any make of loom. The "Little Uster" eliminates the necessity of removing the thrum, heddles, reeds, and drop wires when warp stop motions are used, thus obviating the risk of thread breakage and other damage due to crossing of drop wires during the transport of the new warp to the loom. The machine consists of a tying head, a truck for carrying the head, and one or more tying frames. Tying head is operated by electric motor and may also be operated by hand. According to the manufacturer, the machine ties any material from the finest silks to the coarsest woolen yarns, operates automatically over the whole width of the warp in one operation at a tying speed of 200 to 300 knots per minute, depending on type of material. It is also possible to use the machine as a stationary unit.

Another interesting machine is the "Turicum" Reaching-in Machine which has a maximum output of 3000 threads per hour. The machine can be used for wool, cotton, linen, rayon, etc., of all counts and qualities. Its advance motion can be easily adapted to warps of any density. The threads are selected from the warp one at a time and presented successively to the drawer-in. Other features claimed for the machine are reliability, easy starting, and fatigueless operation.

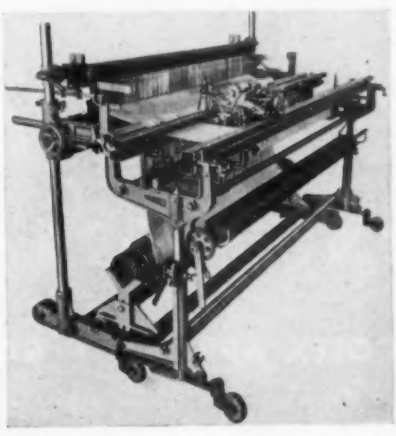
A Dropper-Pinning Machine reportedly pins up to 300 drop wires per minute either on or outside the loom. The machine allows up to six rows of drop wires to be pinned. The magazine holds about 1000 drop wires per row and can be replenished without stopping.



Electronic evenness tester (Uster).

The "Gentsch" Warp Leasing Machine works entirely automatically and without supervision. The preparation of the warp takes a few minutes, and the machine can therefore be operated by personnel in the sizing room. Only two manipulations are required to adapt the machine to the count of the yarn or set of warp. Once the leasing apparatus has crossed the warp from end to end, it stops automatically. The stand for the warp beam can easily be adjusted in every direction by means of hand wheels. It is therefore considered suitable for beams of any diameter up to 24". A thread counter controls the number of threads leased. The machine is driven by an electric motor mounted on the machine itself. It is built in four sizes for different warp widths.

Warp tying machine (Uster).

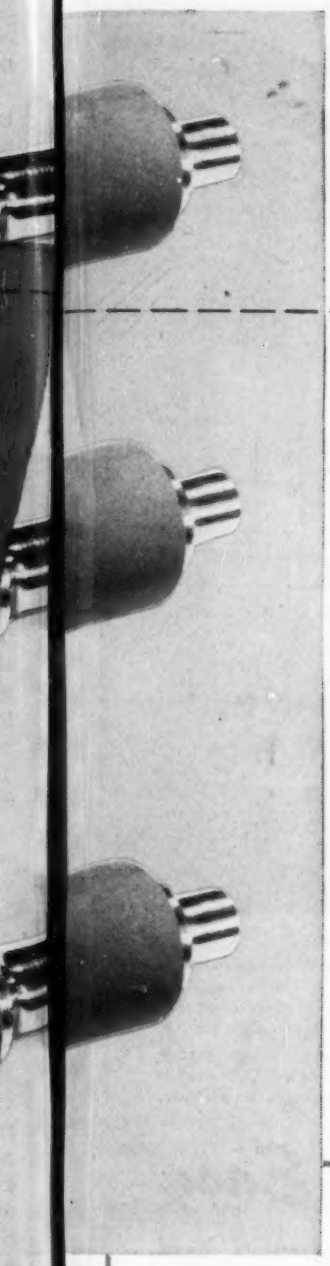


An Evenness Tester which has a gauge comb is so designed that, according to the thickness of the specimen, one of five different widths of slot can be selected. By changing or reversing a pair of gear-wheels, the rate of feed of the material can be set at 1, 2, 4, or 8 meters per minute. This allows a considerable degree of adaptation to the material to be tested. The material is guided through a measuring slot in which a high-frequency condenser field is maintained. The field reacts to irregularities in the cross-section, and the resultant fluctuations are transmitted electrically to an indicating instrument and to a recording instrument, where they can be read off directly as positive or negative percentages of the mean cross section.

A Denting Machine with electric motor is obtainable in four different warp widths. The slant of the reed can be regulated as required and the frame adapted to any loom height. The machine is equipped with a transformer allowing the connection of the motor to the tensions of 110, 125, 145, 220, and 250 volts alternating current. The machine has three different speeds to be used according

ARMSTRONG'S ACCOTEX COTS

CORK COTS • ACCOTEX APRONS • ROLL SHOP EQUIPMENT



Accotex NC-727 Cots have rubber's toughness and cork's grip

YOU get longer spinning service—and consistently high yarn quality—when you run on Armstrong's NC-727 Accotex® Cots. They maintain a good drafting surface longer than "straight" synthetic covers because they combine the advantages of both synthetic rubber and cork.

Specially compounded synthetic rubber gives this Accotex Cot its toughness. High-friction cork provides better drafting with high yarn strength and resistance to glazing. The frequent rebuffing that shortens cot life is not necessary when you equip your frames with Accotex Cots.

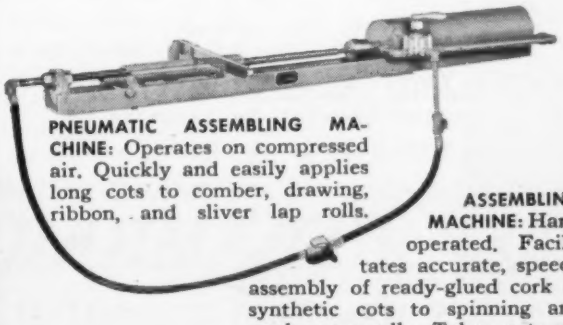
This combination of synthetic rubber and cork also gives you other spinning advantages. Accotex NC-727 Cots resist slicking, so they eyebrow less. They recover quickly from hard ends. Accotex Cots tend to repel textile fibers and are non-sweating. And since they can be rebuffed as many as five or six times, they give you that many extra full service lives.

These are a few of the reasons why Armstrong's Accotex Cots are now serving more spindles than any other roll covering. Your Armstrong representative will gladly help you arrange a test installation of Accotex Cots. Ask him for samples, prices, and any additional information you may want. Or write today to Armstrong Cork Company, Textile Products Dept., 3611 Arch St., Lancaster, Pa. Accotex Cots are available for export.

ROLL COVERING SERVICE THAT'S COMPLETE

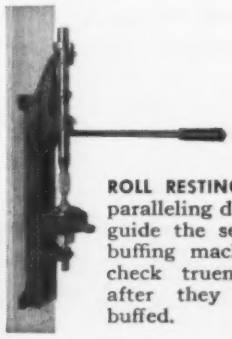
You can get everything you need for complete roll covering service from your Armstrong representative. He can supply not only all three modern types of covers—cork, cork-and-rubber, and straight rubber—but also the roll shop equipment required to apply and service them.

BUFFING MACHINE: Precision-buffs all modern types of cots. Adjustable for all lengths and diameters of rolls ordinarily used in modern textile mills.

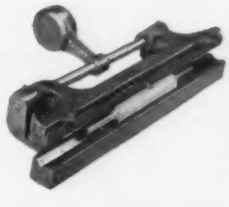


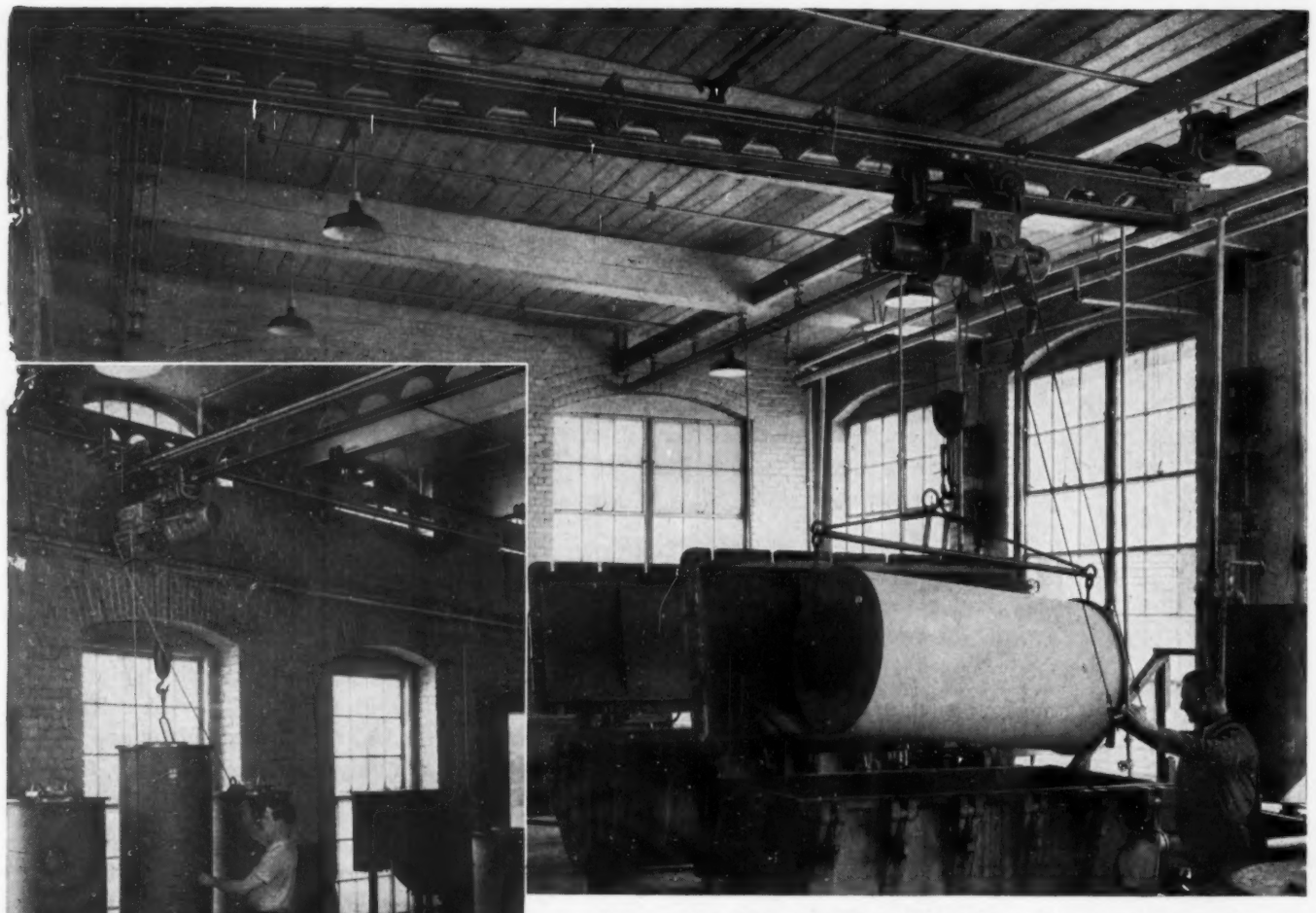
PNEUMATIC ASSEMBLING MACHINE: Operates on compressed air. Quickly and easily applies long cots to comber, drawing, ribbon, and sliver lap rolls.

ASSEMBLING MACHINE: Hand operated. Facilitates accurate, speedy assembly of ready-glued cork or synthetic cots to spinning and card room rolls. Takes cots up to 4½".



ROLL RESTING GAUGE: A paralleling device used to guide the setting of the buffing machine and to check trueness of rolls after they have been buffed.





Above—a hand-propelled crane with electric hoist handles the beams in and out of Morton Beam Dyeing Machines at one of the Mills of Marshall Field & Company, Manufacturing Division, Spray, N. C. This crane may be interlocked with other parts of the extensive Cleveland Tramrail system, enabling delivery of beams to other sections of the mill without rehandling.

Left—a hand-propelled crane with electric hoist serves the Gaston County Beam Dyeing Machines in a leading North Carolina denim mill. It makes the work of handling beams in dyeing machines, extractor and dryer, fast, safe and easy.

BEAM DYEING made *Fast - Safe - Easy*

In the big mills where all factors are weighed with extreme care before any equipment is purchased, will be found Cleveland Tramrail cranes or complete overhead materials handling systems.

Handling of beams in and out of kiers either of horizontal or vertical type is one of the many jobs for which Cleveland Tramrail is used. It picks up and delivers beams simply by pulling a cord or pushing a button. Hazardous, hard work is made safe, easy and production speeded.

Now, more than ever before, wherever heavy materials are handled, you should consider the use of Cleveland Tramrail to cut unnecessary motion and save time. The experience of Cleveland Tramrail engineers, with many varied textile installations, is available to you without obligation.

GET THIS BOOK!

BOOKLET No. 2008. Packed with valuable information. Profusely illustrated. Write for free copy.

CLEVELAND TRAMRAIL DIVISION
THE CLEVELAND CRANE & ENGINEERING CO.
2851 East 287th Street • Wickliffe, Ohio

CLEVELAND TRAMRAIL
OVERHEAD MATERIALS HANDLING EQUIPMENT

to the quality of the yarn. The mechanism runs in an oil bath and does not require any attention, according to the manufacturer.

A Thread Tension Gauge, according to the announcement, is especially suited to measuring exactly the average tension on textile machines which create a considerable periodical oscillation of the thread tension.

A Slub Catcher and Yarn Clearer, designated the "Moos," is constructed so that the maximum clearing effect can be obtained. The blades can be adjusted to allow normal knots to pass through the clearer. The blades are not placed parallel to one another, but at a determinate angle.

Uster Corporation, 2516 Wilkinson Blvd., Charlotte, N. C.

For additional data, request item K-169, using business reply card on page 205, and specify equipment.

Dyehouse Supplies

A stainless steel wet goods truck built to withstand rough handling is on the market. The upper edge of the body is rolled and rounded at the corners to prevent snagging. Rolled edges give additional strength to the body, and the stainless steel body can be cleaned quickly and easily. The truck is self draining. Large, heavy duty casters have aluminum forks and wheels with solid rubber tires molded on. Standard width of body is three feet. Depth of body is 30 inches, and three, four, five, and six-foot lengths are available.

A new line of stainless steel pails, buckets, and dippers is also available in a variety of sizes and shapes.

S. Blickman, Inc., Weehawken, N. J.

For additional data, request item K-182, using business reply card on page 205, and specify equipment.

Ciba Products

Rosanthrene Orange 3R Conc. This dye is said to be distinguished by its clear bright shades, good light fastness, and excellent dischargeability.

Chlorantine Fast Grey GRL and Chlorantine Fast Blue BCL. These two colors have good light fastness in direct shades, as well as when given a urea-formaldehyde resin treatment, the manufacturer claims.

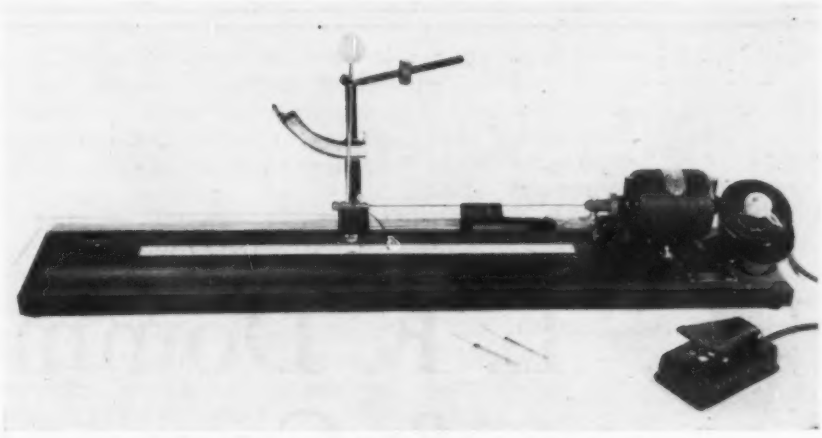
Kiton Fast Rubine 3G is a new addition to the bright red acid dyes.

Chrome Fast Orange ML and Chrome Fast Brown 3GL. These two dyes are new members of the chrome series. They are said to be especially suited for the dyeing of tippy wool by the top-chrome method. They can also be dyed metachrome and chrome bottom.

Sapamine WL is a cationic softener said to have no effect on shade.

Ciba Company, Box 25, Village Station, New York 14, N. Y.

For additional data, request item K-183, using business reply card on page 205, and specify product.



Motor driven twist tester (U. S. Testing).

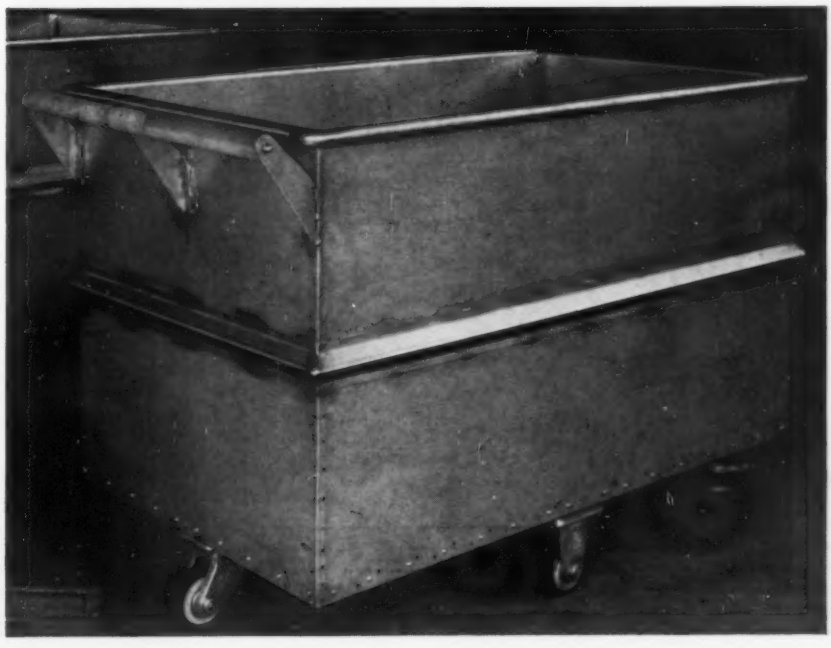
Twist Tester

A new precision motor driven twist tester is now available. All parts of the tester are painted, japaned, or heavily chrome plated. It is equipped with a 110-volt motor which is reversible for Z or S twist. The speed of the motor is controlled by a rheostat foot switch. The motor is of a heavy duty type designed for operation of jewelers' lathes. Yarn is fastened in specially designed clamps by means of thumb screws provided for the purpose.

The motor is reversed by means of a conveniently located toggle switch. The machine is started by means of a foot pedal which also controls the speed, thus leaving the operative's hands free for controlling the test.

The instrument is accurate not only for determining ply twist, but also for determining turns per inch in spun singles yarn. In addition to accuracy and ease of operation, the machine is said to have such features as a quick set dial and tension

Stainless steel wet goods truck (Blickman).



L. F. Dommerich & Company

Executive and General Offices

271 MADISON AVENUE
NEW YORK 16, N. Y.

Telephone: Murray Hill 3-8650

FACTORS

For Manufacturers and Merchants

Inquiries as to our services solicited

●

ESTABLISHED 1840

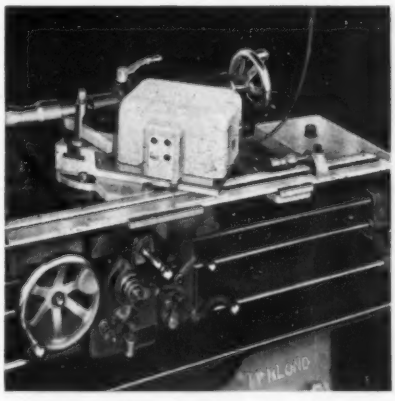
device which enables the operator to conduct the twist test with a minimum of preparation.

United States Testing Company, Inc., 1415 Park Avenue, Hoboken, N. J.

For additional data, request item K-187, using business reply card on page 205.

LeBlond Equipment for Machine Shops

The new 16" Model RT heavy duty engine lathe introduced early this year offers 16 spindle speeds, many of which are in the carbide range. This lathe is said to provide greater ease of operation, to require less maintenance attention, and to have many visual checks for producing more accurate work. The 16 spindle speeds, ranging from 20 to 1025 rpm, or 30 to 1537 rpm, are all shifted by a single lever fitted with a guiding arrow which works in connection with a direct reading plate. Operator's burden is lightened by the universal power rapid traverse which moves carriage, cross slide and tailstock electrically. The single lever control headstock contains a combination gear and belt drive the main drive gears of which are hardened and ground. Spindle is mounted on two tapered roller bearings and one straight roller bearing. The quick change box is totally enclosed, built with heat treated gears mounted on anti-friction bearings, and provides 60 changes of feeds and threads without change gears.



Duplicating attachment (LeBlond).

An unusually wide range of spindle speeds and increased ease of operation are the outstanding features claimed for the new 16" LeBlond Model RT tool room lathe. Over 300 speeds ranging from 6 to 1500 rpm are controlled by a speed adjuster unit. More than 100 speeds may be obtained in each of three ranges without stopping the spindle, resulting in faster operation and reduced operator fatigue, according to the manufacturer. Other engineering advances which add to ease of operation are: universal power rapid traverse which moves carriage, cross slide, and tailstock; the totally enclosed universal quick change box is fitted with a revolving index plate on feed box which contains simple instructions for obtaining five different types of 60 threads and leads each; automatic lubrication throughout headstock, feed box, and apron requires little maintenance attention.

An electric duplicating attachment which is reported to duplicate work accurately, automatically, and quickly, and which can be easily installed was announced in January of this year. The new device can be plugged into the nearest light socket, and will perform accurately within .0015" to .002" the complete range of duplicating operations, such as, straight facing and turning, tapers of any kind, shoulders, necking, concave and convex surfaces, and spherical surfaces. It is readily adaptable to duplicating work between centers or profile facing. Three electric push buttons for in, out, and automatic cycle simplify operation. It does not interfere with the normal operation of the lathe.

The R. K. LeBlond Machine Tool Co., Cincinnati 8, Ohio.

For additional data, request item K-136, using business reply card on page 205.

Palletless Materials Handling with New Attachment

The recently developed "Load-Grab" is an attachment designed for use with the Hyster "20" and Hyster "40" gasoline-powered, pneumatic-tired trucks. Hydraulically-controlled, the steel arms of the device squeeze-grip bales of textiles, cartons or boxes, drums or barrels without the use of pallets.

The "Load-Grab" (Hyster).

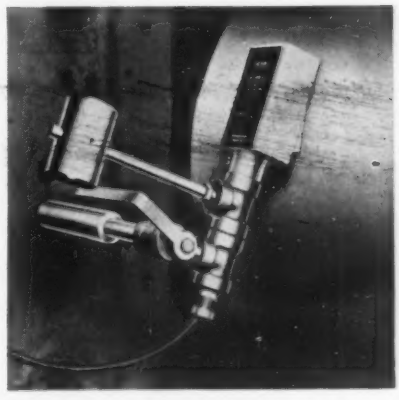
Designed for handling capacity of 1,780 pounds on the Model "20" and 3,350 pounds on the Model "40", the Load-Grab arms will spread from a minimum of 17 inches to a maximum of 62 inches on the "20" and 66 inches on the "40."

Hyster Company, Portland 8, Ore.

For additional data, request item K-132, using business reply card on page 205.

Foxboro Instruments

An instrument for the measurement and control of roll surface temperatures of calenders, dryers, and similar roll-type machines, was developed this year. In operating ranges between —40°F and +350°F, and at all ordinary operating speeds, continuous measurement is assured within 2 degrees, and even higher accuracy is possible in individual installations, depending upon circumstances.



Roll temperature control (Foxboro).

The measuring head is a small rectangular unit, faced with low-friction material and containing a tiny but durable resistance element contacting a T-shaped spring of thin stainless steel, chromium plated. Pressure of this spring against the machine roll is constant, but so light that no marking of the roll or the goods is incurred. The measuring head is connected by three-wire cable of any length with a temperature recorder, with which a controller for any control action desired, may be combined.

Advantages claimed for the equipment include: extreme sensitivity of the measuring head; the disturbing

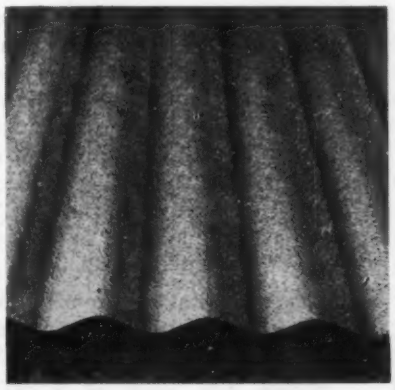
The story behind dress fabric sales

If it's color bright—if it's soft and downy to the touch—if it drapes in graceful folds . . . IT SELLS! That's the story of dress fabrics from the country store to Saks Fifth Avenue. If dull finishes, colors or textures are snagging your fabric's chances for higher sales, then find out about Amalgamated products and service. The products of Amalgamated Chemical Corporation include Fabric Finishes, Hosiery Finishes, Detergents, Wetting Agents, Penetrants, Softeners and Soaps. Amalgamated Field Representatives are trained technical men ready to aid you with textile chemical problems in your mill. And the complete facilities of a modern research and production laboratory are available for service to you. For finer dress fabrics that sell faster, find out about Amalgamated service.

AMALGAMATED CHEMICAL CORP., Phila. 34, Pa.
Southern Division: 1819 Spring Garden Street, Greensboro, N. C.

Amalgamated

Embossed Aluminum Roofing



Embossed corrugated aluminum roofing and siding as shown here is now on the market. According to the manufacturer, rigidity of the sheet is greatly increased, glare is minimized, and a pleasing uniform appearance is provided. Patterns available include squares, diamonds, stucco, simulated grain leather, etc. Reynolds Metals Co., 2500 So. Third St., Louisville, Ky. For additional data, request item K-266.

effects of ambient temperatures, friction, radiation, and operating speed are virtually negligible; installation is simple, and no maintenance is required beyond ordinary good "housekeeping" practices.

The multi-record electronic recorder, another new development, is a high-speed instrument, completely electronic in principle, making from one to six different records on one circular chart, the records being of colored dots so closely spaced as to make virtually continuous lines. The recorder has only one measuring system, either resistance bulb or EMF type, but a positive-acting switching unit automatically brings the varicolored pens into recording position at 6-second intervals, in any sequence desired. The sequence and number of points may be changed at will, quite easily.

It may be used for measurement of temperature, pressure, humidity, liquid level, pH, conductivity, speed, and other process variables.

The d/p cell (differential pressure) transmitter is a new development in metering equipment. Its numerous features of design and construction recommend it for the solution of many of the difficulties encountered in the measurement of flow or liquid level. The device is compact, weighing less than 20 lbs.

All parts exposed to the measured fluid are of stainless steel The cell is available in ranges from 100-800" of water. Ranges under 100" of water will be available in the near future. Range change is a simple operation.

Since the d/p cell employs the force-balance principle there is virtually no movement of its operating parts. Essentially, the measured differential pressure is converted by a diaphragm and torque tube to exactly proportional air pressure, which is transmitted to the receiving instrument and there shown in terms of flow, liquid level or differential pressure. The receiver or receivers may be standard indicators, recorders or controllers.

The dial-type thermometer recently developed for dye house applications is a new instrument. The case, of special aluminum alloy, is said to be not only corrosion-resistant but is also vapor-tight. It is equipped with an all-welded thermal system of stainless steel, the bulb and capillary tubing being entirely of a special molybdenum stainless.

The Foxboro Co., Foxboro, Mass.

For additional data, request item K-119, using business reply card on page 205, and specify product.

Sealed Water Cooler Designed for Mill Use

The Oasis OP-10W water cooler was designed to withstand the most severe operating conditions in abnormally high heat, dust, lint or fumes. For mill use, the cooler will serve up to 70 people an hour in light manufacturing or not less than 40 people an hour where the work is exceptionally heavy.

Oasis OP-10W water cooler (Ebco).

The refrigeration unit is hermetically sealed in oil. Cooling mechanism is precision built and the unit is noiseless in operation. Cabinet is made of heavy gauge galvanized steel with removable front panel sealed in place. The "Oasite" baked enamel finish was specifically developed for extra resistance to acid and alkaline fumes, salt spray and high humidity. Oasite is a tough finish to prevent scuffing or scratches.

Cabinet base is steel, toe-recessed pattern, black baked enamel finish. Top is of stainless steel, anti-splash design. Bubbler is all brass, chrome

Handy Electric Impact Tool

This electric impact tool has been used in textile mills to save time in the construction of dye cages for wool raw stock and also for the maintenance of dyehouse trucks, according to the manufacturer. The impact tool runs just as any conventional electric tool until the resistance to spindle rotation reaches a certain amount. Then a patented mechanism converts the power of the motor into "rotary impacts." It spins on the nut and then the impact mechanism tightens it. The tool will apply and remove nuts, drill, ream, tap, drive and remove screws, etc. Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y. For additional data, request item K-278, using business reply card on page 205.

plated, with "dial-a-drink" lever, and has a self-closing, automatic stream regulator valve. Extra outlets provide for glass filler faucet or remote drinking fountain.

Air circulation is not needed to cool the condenser because the condenser is water cooled. Therefore, the cabinet is sealed against dust and lint or fume-laden air. This special sealed-cabinet construction also provides complete insulation and prevents interior condensation from forming.

The Ebco Manufacturing Company, 401 W. Town St., Columbus 8, Ohio.

For additional data, request item K-270, using business reply card on page 205.

Laminated Parallel Plugs and Crank Arms

Two loom items, parallel plugs and crank arms, have been made from a material called "Pakkawood."

Pakkawood is a laminated and impregnated birch plywood composed of very fine layers (32 to each inch of thickness) compressed under 30 tons of steam pressure to one half of the original thickness of the material. The process forms an entirely new substance or compreg. According to the manufacturer, it will not warp, it is water resistant, it has an extremely high flexural strength, it will not burn, and it will not split.

The parallel plugs are almost indestructible, it is claimed, and do not cause harm to the metal parts of the parallel itself. The resin content of the material forms a natural lubrication for the life of the plug.

The crank arms give steady and accurate "beat-up" and, as the parallel plugs, are almost indestructible.

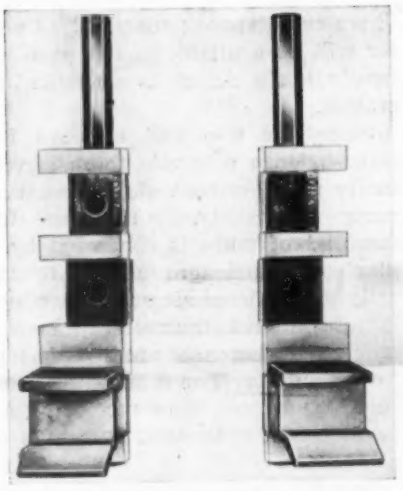
Schmidt Manufacturing Co., 280-292 North St., New Bedford, Mass.

For additional data, request item K-162, using business reply card on page 205, and specify product.

Saddle and Cap Bar Have Replaceable Bearings

A saddle and cap bar for long draft spinning, which features replaceable bearings, has been developed. Used together, the new saddle and cap bar provide an oil free drafting unit that eliminates roll scoring, reduces lint accumulation and roll picking, and lowers the average power consumption, the manufacturer claims.

The design of the saddle is smooth



Cap bar assembly with replaceable bearings (Dixon).

and clean and permits a wide range of roll spacing. There are several models available for use in weighting three rolls in most long draft spinning, as well as a jump saddle for weighting only 2 rolls. This item is adjustable to accommodate from 1⅝" to 4⅞" between front and back rolls.

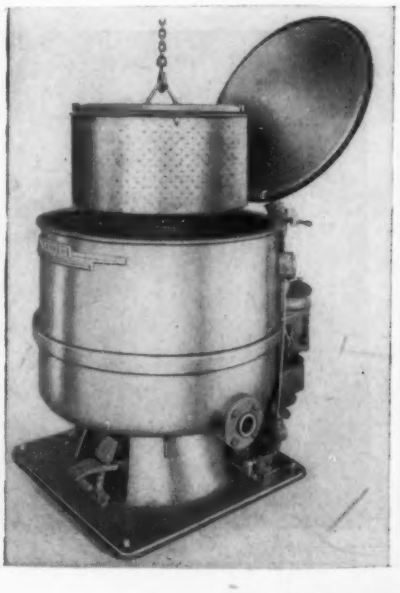
Dixon Lubricating Saddle Co., Bristol, R. I.

For additional data, request item K-115, using business reply card on page 205.

Extractor for Skein Yarn Soaking Operations

A new extractor especially for use with cake and skein yarn soaking operations has been developed. This machine is an underdriven, open top model built on the "super-self-balancing" principle of the 30" Fletcher "Junior" extractor.

Extractor for soaking operations (Fletcher).



In addition to the usual permanent basket, supplied in this case without top ring, this extractor is equipped with several removable baskets. These removable baskets are made of stainless steel, have a unique lifting arrangement, and although they are securely locked in place while running, can be inserted and removed with ease and dispatch.

A complete soaking installation consisting of steam jacketed mixing tank and soaking vats, recovery tank, loading and unloading table, and hoist with monorail, is also available.

The advantages claimed for this arrangement include (1) appreciable saving in labor, (2) less yarn handling with corresponding improvement in quality of yarn, and (3) less floor space required.

Fletcher Works, Inc., Glenwood Ave. and Second St., Philadelphia 40, Pa.

For additional data, request item K-117, using business reply card on page 205.

Aluminum Alloy Bobbins for Rayon and Nylon

Several types of bobbins have been made from a new high strength alloy of aluminum during the year. These bobbins are designed for rayon or nylon yarns where excessive pressure is present. Also, since they are made of aluminum, they can be readily washed and steamed.

According to the manufacturer, these bobbins are stronger, resist wear better, and have better balance at high speeds.

Lestershire Spool & Manufacturing Co., Johnson City, N. Y.

For additional data, request item K-137, using business reply card on page 205.

New Synthetic Detergent

A new synthetic surface active agent is being marketed to the industry under the name Sulframin AB Concentrate. This material is reported to be highly concentrated dodecyl toluene in small flake form.

The new detergent is recommended for a wide variety of uses and in various industries including the textile industry.

Features claimed for Sulframin AB are: high concentration, resistance to acids and alkalis, and excellent

HOW THIS PATTERN WAS PRINTED IN— *Australia*

Printex Pty. Ltd. a leading screen printer in Sydney, Australia, selected Aridye® Pigment Colors for this gay, fast-color design on Cellular Cotton. They began using Aridye colors about two years ago after learning of the simplicity with which pigmented water-in-oil emulsions can be applied either for machine or screen printing.

The floral pattern was printed with Aridye Blue FC2G, cut with Aridye Clear 6214. The dark blue was cut 1:10, and the light blue 1:100. After printing in the usual way, it was then merely air dried and heat treated to provide maximum fastness to washing and dry cleaning. *No ageing, soaping, washing, or other acid treatment was necessary.*

Aridye's ease of application and numerous other advantages are solving problems for progressive textile printers in many parts of the world. An Interchemical textile representative will be glad to discuss the numerous ways in which they will be of benefit to *you*. For full details, write to Interchemical Corporation, Textile Colors Division—Pioneers in Pigment Colors for Textiles — Box 357, Fair Lawn, N. J.

CHECK THESE EIGHT ADVANTAGES

Sharpness of Mark • Exceptional Fastness to Sunlight
Uniformity of Shade • Fastness to Washing • Bright Colors
Economy • Ease of Application • No Impairment of Hand

Aridye *Pigment colors*

ERCHEMICAL CORPORATION, TEXTILE COLORS DIVISION • FAIR LAWN, N. J. • ROCK HILL, S. C. • PROVIDENCE, R. I.

Sole Distributor for Australia: John Beith & Co., Pty. Ltd., Union House, George St., Sydney

Standard Oil spindle oils help boost yarn production by permitting *heavier packages* and *higher* spindle speeds without sacrifice of quality. Made in a complete viscosity range, there's a Standard Oil spindle oil to meet the requirements for your spinning, throwing, spooling and twisting machines . . . and you can rely on them, not only to make top spindle speeds possible, but to cushion against vibration, and resist hunting and lagging. There is an experienced Standard Oil lubrication engineer in your area. He will gladly study your lubrication requirements, recommend the right lubricant for each type of equipment, and prepare lubrication schedules. His specialized experience in the textile field will prove helpful to you.

boost production

STANDARD OIL COMPANY INCORPORATED IN KENTUCKY

detergency, especially at higher temperatures.

The detergent performs several functions, among which are: cleanser, dyeing assitant, wetting agent, and penetrant.

Ultra Chemical Works, Paterson, N. J.

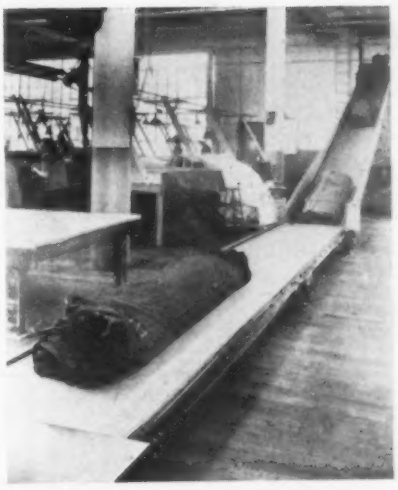
For additional data, request item K-247, using business reply card on page 205.

New Belt Conveyors

The Levelbelt is a horizontal belt conveyor of a standard design built for conveying boxes, bags, cartons, and cases. It is available in lengths of 21 to 161 feet and in standard heights of 28, 32, and 36 inches above the floor.

The drive mechanism is standardized for power up to 1 hp to operate at a speed of 60 feet per minute in either direction. A unique feature, according to the manufacturer, is that the take-up for maintaining belt tension is incorporated with the drive mechanism. A roller type bed is used, and the conveyor is available in two standard widths of 14 and 24-inch belts.

The Inclinebelt with horizontal feed section is used for elevating and lowering boxes, cases, cartons, sacks, or bundles. It provides an "off the shelf" conveyor for this common handling problem.



Belt conveyors (Standard).

A rough surface belt is furnished for the conveyor which is set permanently at 28 degrees. Two belt widths are available: the 14" width for commodities up to 15½" wide; and the 24" for those up to 25½" wide. Both widths are made in lengths for floor to floor elevations of 8' to 14'-6" inclusive.

The machine can be furnished with or without the horizontal feed section at the bottom. The top end is curved like a gooseneck to provide horizontal feed or discharge of commodities. The size and type motor for the conveyor depends on local requirements.

Standard Conveyor Company, North St. Paul 9, Minnesota.

For additional data, request item K-160, using business reply card on page 205, and specify type of conveyor.

Hart Chemicals for Finishers

A highly active synthetic detergent composed of a modified alcohol sulfate and complex calgonacious phosphates in light-colored fine powder form is Syntergen MV Powder. It is soluble in warm water yielding

Fayolle-Ancet Circular Weaving Loom

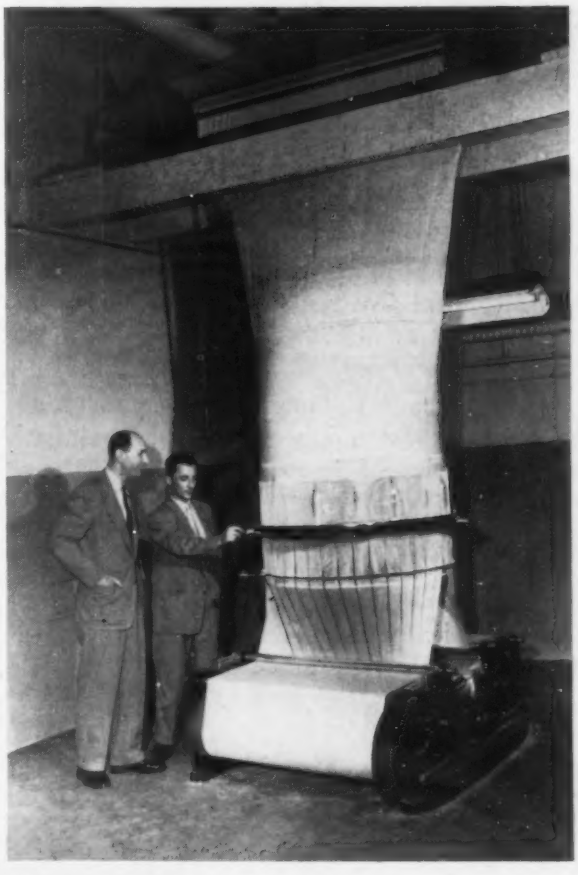
Production of at least three times that of ordinary looms is claimed for this circular weaving loom which was shown recently in this country. Designated the Fayolle-Ancet loom for its French manufacturer and inventor respectively, the machine was brought to this country with the hope that a licensing arrangement may be worked out for its production here.

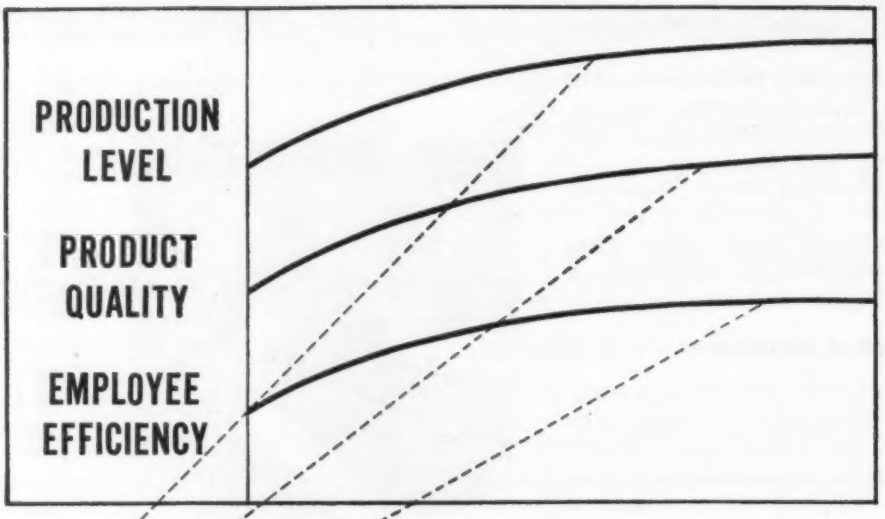
Beams on each side of the base feed warp yarns to the loom. Filling is accomplished by eight shuttles which follow each other in a horizontal circular motion through eight sheds of yarn divisions formed by horizontal harnesses. Yarn carriers feed the equivalent of eight picks into the warp in a serpentine motion. Serrated wheels mounted at an angle tuck filling into position and cloth is taken up by a set of rolls mounted high over the circular shuttle plane, and wound on a beam above the rolls.

Three automatic stop motions are provided in the warp and one in the filling. The machine operates from 20 to 30 rpm and produces a tubular fabric which measures over three yards in width when opened. It is claimed that filling can be replaced in all eight shuttles in two minutes.

Lawrence Berenson, 165 Broadway, New York 6, N. Y., is New York attorney for the French concern.

For additional data, request item K-269, using business reply card on page 205.





THE INVISIBLE SECURITY OF AIR CONDITIONING GIVES YOU RESULTS YOU CAN SEE

Absolute temperature and humidity control in your plant will give you results you can *see—in high level production . . . uniform quality of products . . . and improved employee efficiency.*

Every year more and more mills are recognizing the downright economic necessity of air conditioning . . . are depending on York for installations which assure them year 'round operation at a minimum of expense and attention.

Regardless of the size of the mill or the special problems involved, there's a complete range of York equipment to meet every specification. Since 1885, York has been the foremost name in mechanical cooling, and York central station installations are in operation in many of the country's largest and most modern textile plants.

And, whatever your specific needs in air conditioning, there's a complete range of York equipment to meet them, and a York representative ready to talk textile installations. He is prepared to supply your plant engineer, consulting engineer and installing contractor with specific information as to equipment—its capacities and performance to fit your special needs. His accumulated data on air conditioning in your particular field will be helpful. York Corporation, York, Pennsylvania.

YORK *Refrigeration and Air Conditioning*

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

clear, very sudsy solutions. The product is indefinitely stable on storage and can be satisfactorily used in acid, alkaline or hard waters.

Syntergen MV Powder is recommended for use in soaping prints, scouring all types of textiles, as a levelling agent in dyeing, for eliminating scum formation, and as a high sudsing agent.

Syntho-Softener B is a substantive synthetic softening agent in the form of a white paste. This product assures a semi-permanent soft, lofty hand with maximum draping qualities for all types of cotton, rayon, acetate, Bemberg, linen and nylon fabrics. Syntho-Softener B may be used on whites with no yellowing and particularly on colored goods since it will not affect the color or light-fastness of dyed goods or prints. The full light-fastness of dyestuffs such as directs, rapidogens, indigosols, vats and the like is retained with this softener. Syntho-Softener B is easy to apply, shows no discoloration on pressing or ageing of the goods, and will exhaust in the dyebox to give economical application.

An alkylated aromatic sodium sulfonate showing excellent wetting and good scouring and sudsing action is Hartofol C, an amber colored soft gel that is clear-soluble in water. This product is stable on storage and completely stable in hot acid or alkaline solutions. Hartofol C can satisfactorily be used in water of any hardness, in the presence of salts, soaps, and emulsions.

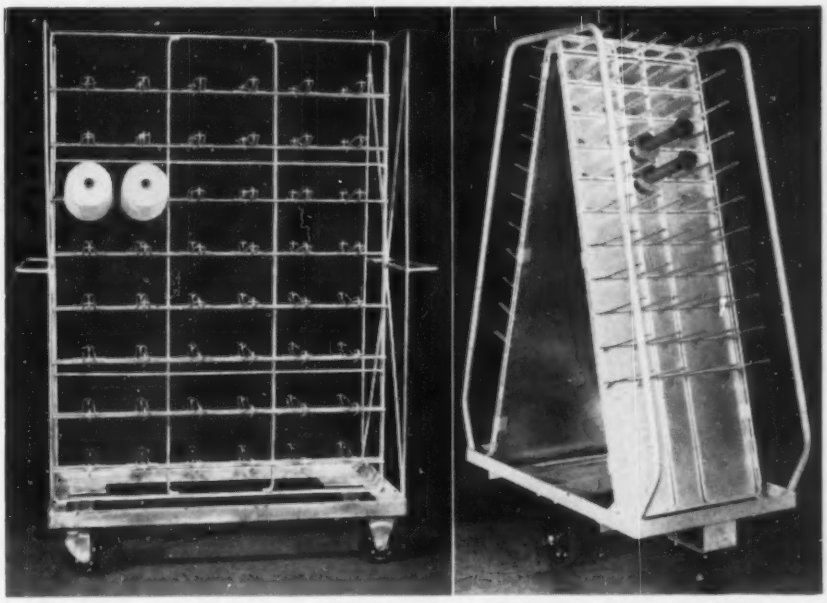
Hartofol C is recommended wherever wetting-out, rewetting, and scouring action are required. It is recommended for vat or pad dyeing, for package dyeing and for dyeing operations in general to give greater uniformity of shade. Added to printing pastes, it improves penetration and gives better fastness to soaping. Hartofol C finds application as an all-purpose surface active agent for scouring, soaping off, and wetting out all types of fabrics.

Hartuwet A and B are semi-permanent water-repellents which do not require high temperature curing. Hartuwet A is a stable white emulsion, and Hartuwet B is a clear solution. The two materials are used together to prepare a stable, single bath through which the goods are run. Since the bath is neutral, dye shades are not affected. Drying is done at ordinary temperatures on hot cans.

The Hart Products Corporation, 1440 Broadway, New York 18, N. Y.

For additional data, request item K-135, using business reply card on page 205, and specify product.

Stainless Steel Cone and Bobbin Trucks



Stainless steel trucks for transportation of cones (left) and bobbins. Johnson Engineering & Manufacturing Co., 173 Gilligan St., Wilkes-Barre, Pa. For additional data, request item K-262, using business reply card on page 205, and specify truck.

Jacobs Loom Supplies

Rubber sand roll covering with a pyramid design for better gripping has been introduced. This sand roll covering is neutral in color.

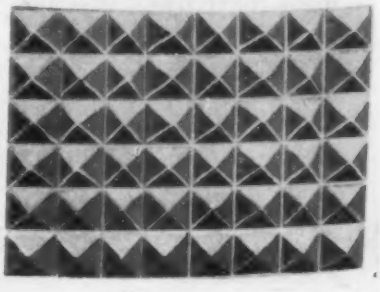
It has a fabric back which prevents stretch and cements easily to the roll, according to the manufacturer. The product is available in 3" widths.

Another item developed for the loom is a new rubberized fabric strapping. It is made of pre-stretched cabled yarn, woven into fabric which is rubber impregnated. The product is flexible, though stretchless, and is oil and heat resistant, strong and uniform in thickness. Straps are made to any required specification.

E. H. Jacobs Northern Div., The Bullard Clark Co., Danielson, Conn.

For additional data, request item K-127, using business reply card on page 205, and specify product.

Pyramid sand roll cover (Jacobs).



New Brown Instruments

Two new devices are particularly adapted to textile processing problems. One of the new instruments is a thermometer with a built-in timer. The instrument includes a timer action which operates only when the temperature reaches a set point. The timer continues to operate regardless of minor temperature fluctuations, permitting accurately timed processing from the point of original correct reaction temperature through to the process end.

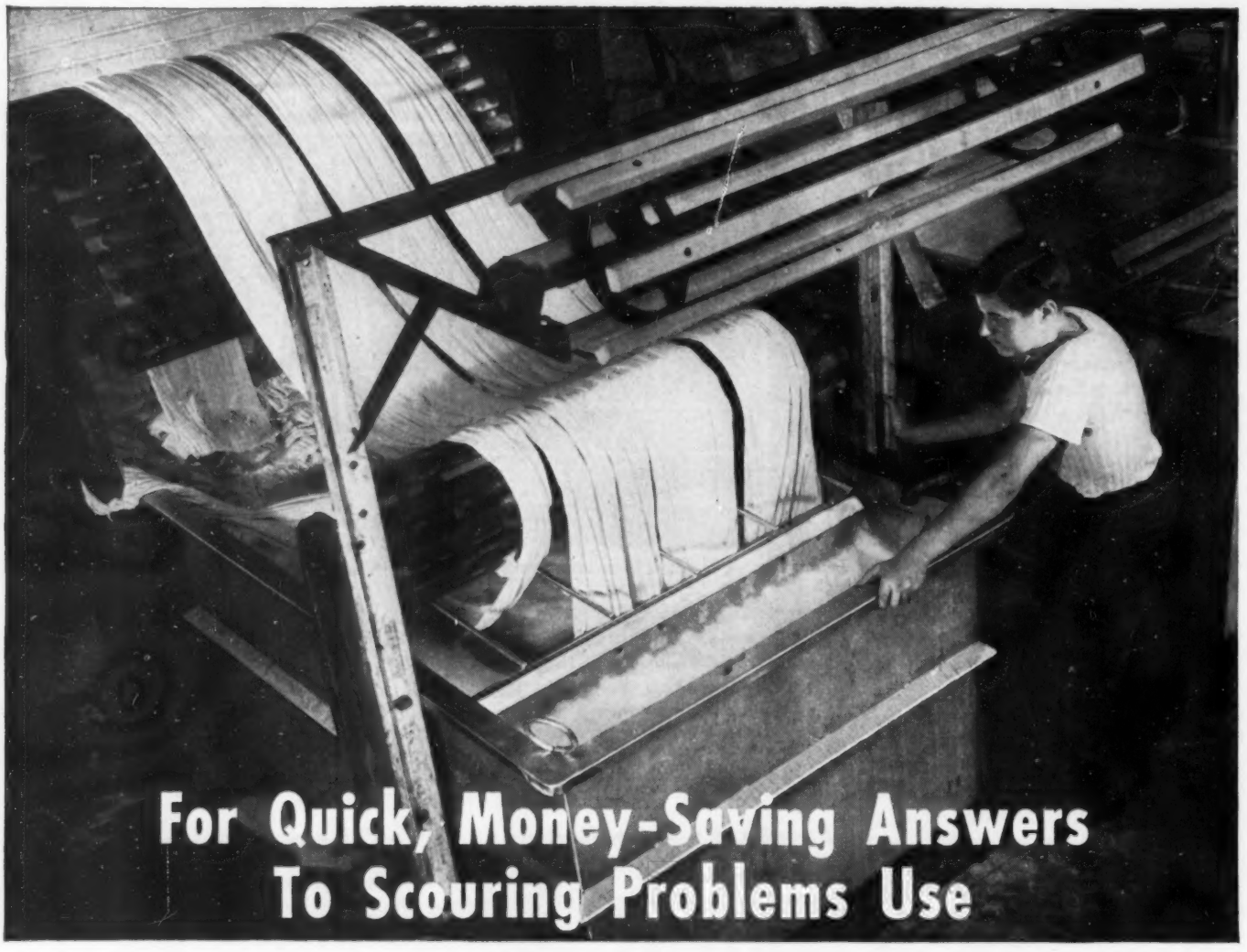
The second new device is a completely redesigned all-electronic Moist-O-Graph which utilizes modern electronic principles in the power unit and in the recorder-controller unit. This instrument is said to be the first all-electronic moisture content recorder and controller to be offered to the textile industry.

The Brown Instrument Co., 4492 Wayne Ave., Philadelphia 44, Pa.

For additional data, request item K-200, using business reply card on page 205.

Heavy Duty Mill Motor

A new d-c steel heavy duty mill motor is adaptable for use totally-enclosed non-ventilated or separately ventilated. It can also be furnished suitable for self ventilation. The self ventilated machines are cooled



A Feature to Remember!

ORATOL L-48 IS COMPLETELY SOLUBLE IN EXTREMELY HARD WATER . . . GIVES HIGH FOAM

ORATOL L-48

The problem in the scouring operation is to condition the goods to obtain even dyeing and level shades, and a fibre properly prepared for later operations.

The powerful detergency . . . rapid scouring action . . . great rinsability . . . and effectiveness of Oratol L-48 in neutral, acid, or alkaline solutions make it logical to expect cleaner goods better prepared for bleaching, dyeing, or printing. This means:

1. **Fewer rejects and redyes**
2. **More level dyeing—less streakiness**
3. **Clean, vibrant colors**
4. **Improved hand**

Other important advantages include more rapid cleansing and rinsing, less water requirement, and a speeding up of production through greater latitude of operation.

Ask our representative for full details on Oratol L-48, or, write today for technical data and generous free sample for testing.

Plants, Branches and Warehouses

Plants: Passaic, Carlstadt, N. J.; Los Angeles, Calif.

Warehouses: Providence, R. I.; Philadelphia, Pa.; Utica, N. Y.; Chicago, Ill.; Greenville, S. C.; Chattanooga, Knoxville, Tenn.

WOLF BRAND PRODUCTS

JACQUES WOLF & CO.

Chemicals PASSAIC, N. J.

by a fan mounted at the rear of the armature; in the totally-enclosed non-ventilated motors, the fan action is provided by the back ends of the coil supports. Effective internal circulation of air lowers hot spot temperatures.

Shortened bearing housings, careful proportioning of field pole design, and the use of other modern developments in design and materials convert inactive space and weight into greater driving power, it is claimed.

Special grease slingers and grooves keep grease and dust away from commutator and windings. The bearing caps are readily removable to facilitate bearing inspections. The improved solid cylindrical roller bearings are completely supported against thrust and radial loads. Shaft stress is low because the bearings are close to the load.

Crocker-Wheeler Electric Mfg. Co., Ampere, N. J.

For additional data, request item K-201, using business reply card on page 205.

New Spectrophotometer Has Many Improvements

A new spectrophotometer, designated Model B, is reported to have better ultra violet performance, better resolution, and more freedom from stray light, than other instruments in the low price field. One of the most important features claimed for the instrument is that of continuously variable slits.

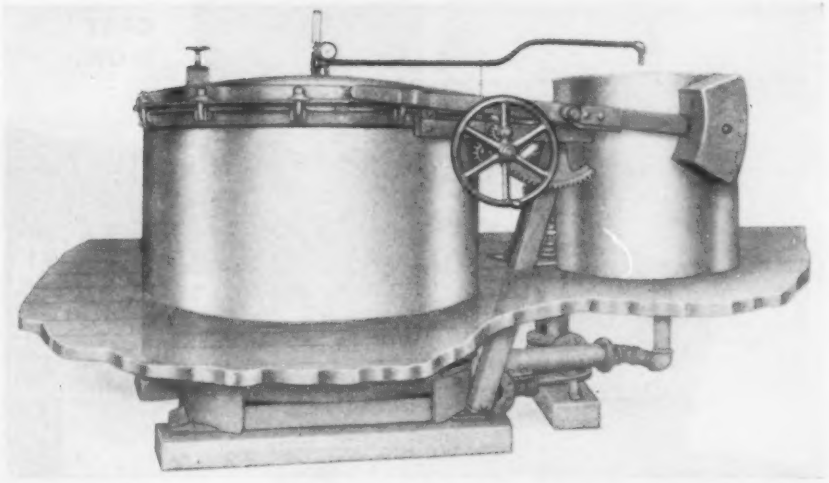
The instrument is equipped with direct reading wavelength and absorbance scales, a sloping instrument panel for easy visibility from either a standing or a sitting position, a minimum number of controls, easily adjustable cell compartments, and easily interchangeable accessories.

The instrument is said to be extremely versatile. It can measure both transmission and absorbance on solids, liquids and gases. Cells up to 75 mm. in path length can be accommodated by the standard cell holder with the adjustment. It has interchangeable photo cells for measurement from 320 to 1000 millimicrons.

The effects of stray light have been almost completely eliminated in the Model B. The d-c operated instrument gives readings accurate to ½% transmission or better. Its resolving power is especially high and it has numerous other features which make for all around accuracy, convenience, and versatility.

National Technical Laboratories, South Pasadena, California.

For additional data, request item K-202, using business reply card on page 205.



Stainless steel raw stock dyeing machine for wool (Lawrence).

Raw Wool Dyeing Machine

Made of 3/16-inch polished stainless steel, insulated the entire depth, and designed to accommodate 500 pounds of dry wool in the kier, an improved dyeing machine is available. To simplify loading and lifting out, the cover is counter-balanced and swings to a vertical position by means of a geared hand wheel. Steam pressures as low as eight pounds can be used as well as high-pressure steam. A pump is provided entirely separate from the kier. All parts of the pump are said to be readily accessible and adjustable, and bearings are external grease lubricated, having no contact with the dye liquor.

The expansion tank is made of stainless steel and has a 212-gallon capacity. It feeds the pump through a discharge pipe at the bottom and helps to maintain an even circulation of dye liquor during dyeing.

A dye liquor circulating pump for top dyeing machines is equipped with a four-way valve. The pump is arranged so that the flow of the liquid can be reversed by a throw of the handle without stopping the pump. Both the pump and valve are made of stainless steel throughout.

Lawrence Machine and Pump Corporation, 371 Market Street, Lawrence, Mass.

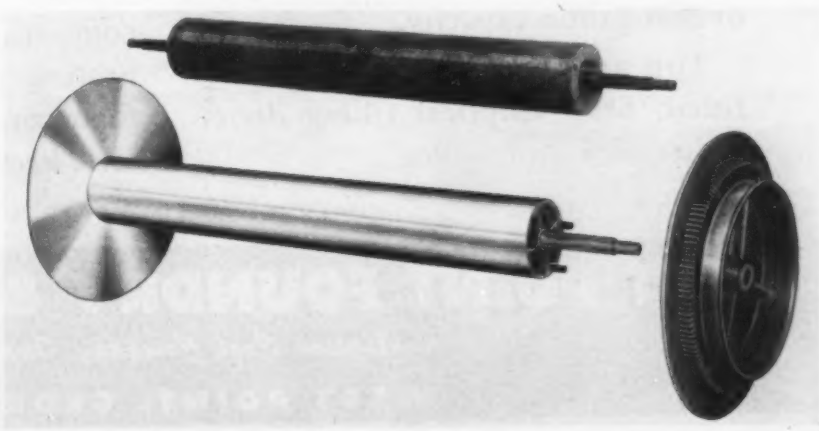
For additional data, request item K-194, using business reply card on page 205, and specify equipment.

Light-Metal Loom Beams and Replacement Barrels

Light-metal loom beams are now available for all standard makes of warping equipment. They are furnished in lengths as desired. In addition to the lowered weight, the manfacturer cites these advantages: permanent freedom from splinters, rust-proof and warp-proof.

Aluminum loom replacement barrels have also been placed on the

Aluminum replacement barrels for loom beams (Hayes).



...to fit YOUR REQUIREMENTS

Install new and improved size kettles and controls and eliminate many of your sizing problems.

Our mill-tested, standard kettles are available in 3 body metals:

Cast Iron (*lined with 48 ounce copper welded in place.*)

Solid Copper (*8 guage.*)

Stainless Steel (*12 guage.*)

Each furnished in 110, 160, 250 or 360 gallon capacity.

Top and fixtures are expertly fitted. Semi-elliptical filling doors equipped with handles.

Single motion brass stirrers, and baffles for superior agitation and uniform size mixing.

Vertical agitator shaft, operating in rigid step bearing, is driven by smooth-running bevel gears mounted in cast housing. Equipped with a 14" x 2" T & L pully for 100 RPM or individual motor drive.

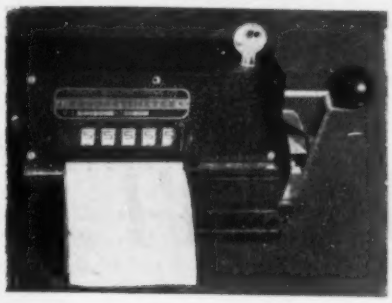
Kettle is tapped for steam pipe connection and equipped with Brass heating coil. Automatic regulators for accurate control furnished on any style kettle.

WEST POINT FOUNDRY & MACHINE CO.

(Batson-Cook Company, Owners)

WEST POINT, GEORGIA

Printing Counter



This stroke and rotary type printing counter prints six figures and makes a record on several card forms to show production registered on the counter. The machine is said to eliminate the necessity for handwriting group cards, production cards, and errors occurring therefrom. Applications recommended for the counter include cloth folders, warpers, finishing machines, spinning and twisting frames. Durant Mfg. Co., 1973 N. Buffum St., Milwaukee 1, Wis. For additional data, request item K-279.

market by this manufacturer. These barrels, which are supplied with new gudgeons at each end, are accurately machined to run within .010 total indicator reading in relation to the gudgeons, it is claimed.

Hayes Industries, Inc., Jackson, Mich.

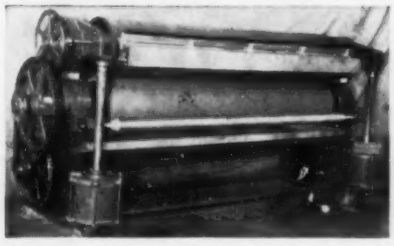
For additional data, request item K-131, using business reply card on page 205, and specify product.

Birch Developments

A heavy duty ball bearing cloth opening machine or scutcher is equipped with rubber draw rolls, and it is driven by a built-in motor drive and one continuous flat belt for high speed operation and quiet running. All ball bearings are of the self-aligning type, and all shafts are of increased diameter. Both beaters and scrolls are of heavier construction than older models. This machine is designed for opening cottons or rayons of all weights.

A heavy squeeze roll unit for extracting or padding, has a capacity of 30,000 pounds. Pressure is applied either by air or hydraulic cylinders designed to give uniform extraction.

Heavy extracting squeeze roll unit (Birch).



The rolls are mounted in self aligning roller bearings, and larger diameter shafts have been provided to eliminate "crowning" of the rolls. The machine is fitted with a constant or a variable speed motor, whichever is specified. For padding, the machine is equipped with a stainless steel tank. An overhead folder is built in where it is required to fold the fabric after it has passed through the machine.

A medium pressure squeeze roll unit with a stainless steel and rubber roll is for use on existing machines such as continuous dyeing machines, open soapers, etc. Squeeze rolls may be furnished complete with pressure gauges and valves.

Adjustable spiral opening rolls are made of stainless steel, and they are equipped with ball bearings. This machine is made in all widths for removing wrinkles and double edges on continuous machines, mangles, and mercerizing ranges. The amount of contact between the cloth and the rolls is adjustable.

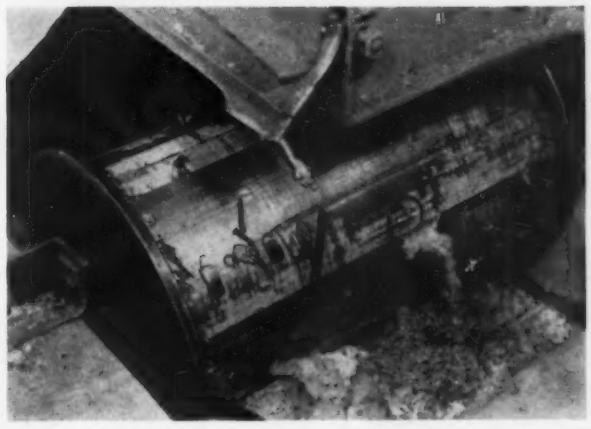
A continuous crabbing machine is made with four stainless steel tanks, stainless steel immersion rolls, driven spiral opening ahead of each nip, steam pipes and spray pipes, and rubber covered squeeze rolls with pressure applied by air cylinders. The last nip is of heavy design capable of 30,000 pounds pressure for extracting.

The entering end is fitted with overhead tension rails and a cloth guider. The delivery end is equipped with a folder, and a wind-up arrangement is supplied when desired.

Birch Brothers, Inc., 32 Kent Street, Somerville, Mass.

For additional data, request item K-160, using business reply card on page 205, and specify equipment

Right, self-energized magnetic pulley for textile applications requiring automatic separation of tramp iron from fibrous materials conveyed on a belt (Eriez).



Self-Energized Magnetic Pulley

A self-energized magnetic pulley requiring no electric current to generate a magnetic field is now being commercially produced. This pulley is adaptable to all textile applications requiring automatic separation of tramp iron from fibrous materials conveyed on a belt .

The unit will work effectively through belts of rubber, canvas, leather or any other non-magnetic material, thereby performing automatic separation.

Eriez Manufacturing Company, 354 East 12th Street, Erie, Pa.

For additional data, request item K-203, using business reply card on page 205

New Stroboscope

The Strobolume is a high-intensity light source for low-speed stroboscopic observations and for single- and multiple-flash photography. It is well suited for studying the motions of machines operating at relatively low speeds. Two examples are the analysis and adjustment of shuttle motion in looms and of register in printing.

The instrument is designed to be

The Strobolume (General Radio).

AS you suspected, it's that panel of Taylor Fulscope Time Schedule Controllers. They're carrying out the whole size cooking operation automatically! The operator has just loaded a cooking kettle, pushed the starter button, and stepped out of the picture. The Fulscope Indicating Controller on the wall maintains the proper storage temperature.

This scene in one of the south's largest denim mills shows how Taylor Accuracy is helping to keep quality up and costs down. Once the ideal cooking schedule is determined, the Taylor control system faithfully reproduces each succeeding batch of size. It prevents overcooking and overboiling and insures uniformity. And the dual-case construction of each Fulscope permits easy accessibility to both control mechanism and cam and trip mechanisms.

This system is only the first step toward automatic control of the entire slashing operation. Ask your Taylor Field Engineer for further information on our control systems for all four steps: *size cooking, storage kettle temperature control, size box level control,* and finally, *slasher cylinder control.* Or write Taylor Instrument Companies, Rochester, N. Y., or Toronto, Canada.

▾ ▾ ▾

Instruments for indicating, recording, and controlling temperature, pressure humidity, flow and liquid level.

Taylor Instruments

MEAN

ACCURACY FIRST

IN HOME AND INDUSTRY

flashed from an external contactor, and hence is useful where the motion to be examined is related to angular position of a shaft, such as a crankshaft, camshaft, or countershaft, on one end of which a contactor is held or clamped. It can also be flashed from a special slow-speed Strobotac. The high intensity and short duration (10 microseconds) of the flash make the Strobolume an excellent light source for single-flash photography in research projects, where the motion of the subject is often too fast to be stopped by conventional speedlights, according to the manufacturer.

General Radio Co., 275 Massachusetts Ave., Cambridge 39, Mass.

For additional data, request item K-123, using business reply card on page 205.

Staple Cutter Equipped With Variable Speed Drive

Fiber cutters are now being supplied with a variable speed drive that controls the speed of the feed rolls. Instead of a single motor drive, with the relative speeds of the revolving knife cylinder and the feed synchronized by changing gears, these machines now may have two motors, one to drive the knife cylinder, the other a variable speed drive for the feed rolls only. Any length of cuttings, within wide limits, can be obtained by the turning of a hand wheel on the variable speed motor. Speed of the motor driving the knife cylinder remains constant.

The cutting machine has an arrangement whereby the continuous filaments are guided into the feed box at right angles to the knife cylinder, under a constant tension. The variable speed drive is located at the left. The variable speed drive controls the feed rolls at the point where the fibers are fed to the knives.

Taylor-Stiles and Company, 21 Bridge Street, Riegelsville, N. J.

For additional data, request item K-272, using business reply card on page 205.

High Speed Warper Features Uniform Density

A new type of warper adaptable for either cotton or synthetic yarns is designed to produce uniform yarn density on the beam during the beam build up.

Uniform density is accomplished by means of hydraulic cylinders, thereby controlling the pressure between the beam and the cylinder at all times. This pressure is finger tip controlled with a differential of from zero to 1000 pounds per square inch of surface contact of the yarn against the cylinder.

Other features of this machine are a four-to-one range of yarn speed with push button control; a high speed blower unit with a tube extending the entire width of the machine used for cleaning lint from the combs (cotton); a control panel consisting of a tachometer registering yards per minute; a counter giving total yards; a pressure gauge showing total pressure applied by the hydraulic system; a lever for positioning in a running or doffing position; and a remote control valve for controlling beam pressures.

The warper is operated within easy reach of the operator. With the use of a rod, the warper can be started gradually, thereby reducing the danger of broken ends. This rod is also used for jogging the beam into position for tying broken ends.

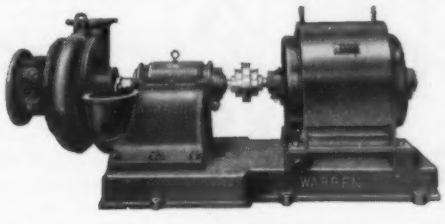
The warper can be stopped at any time by the use of push buttons mounted on the front of the machine. The drive is composed of a flat friction clutch, and the braking is accomplished internally inside the cylinder.

Allen Company, 130-156 River Road, New Bedford, Mass.

For additional data, request item K-273, using business reply card on page 205.

Metal Power Lug Hold-Up

A new type power lug hold-up called "Wej-Rite" is fabricated entirely of metal. Secure locking action is made possible through wedges actuated by a single machine screw which fits the majority of picker sticks in use today. Adjustment of power setting is easy since it is only necessary to loosen the screw, move the clamp to a new position, and tighten the screw. The entire assembly is cadmium plated to prevent rust. W. D. Dodenhoff Co., 619 Rutherford St., Greenville, S. C. For additional data, request item K-281.



Liquor Pump for Dyeing and Finishing Applications

This Type L liquor pump is one of a recently improved line of pumps for dyeing and finishing applications. It is adapted to handling both corrosive and errosive liquids. Special metals and alloys are available; also rubber lined pumps. A new line of four and six stage centrifugal pumps has also been placed on the market this year. These pumps handle boiler pressures of from 700 to 1200 psi with capacities up to 850 gpm. Warren Steam Pump Co., Inc., Warren Mass. For additional data, request item K-280, using business reply card on page 205, and specify type of pump.

New Anthraquinone Vat Dyes

"Ponsol" Brilliant Orange RK Paste produces a brilliant tangerine shade. It possesses good resistance to chlorine, washing, crocking, hot moist pressing, dry cleaning, and salt water spotting, according to the manufacturer. It also has good fastness to light and peroxide bleaching and is recommended for fabrics that must withstand weathering or that require a combination of light fastness and good resistance to wet processing. It is suitable for dyeing cotton and viscose process rayon in all forms.

"Ponsol" Gray R Paste produces gray shades with a desirable neutral tone. It will serve as a base for a wide range of attractive grays having good fastness to light. It exhibits generally good resistance to various wet processing treatments

Now you can Eliminate those Size Kettle Evils... THE SIMS WAY

Stainless Steel Steam Jacketed Size Kettle

Here is the *Stainless Steel* Steam Jacketed Size Kettle in which you *KNOW* how much starch and water is being mixed. No more does water from live steam enter your size through a coil. No longer will you have to wait for your kettle to be lined.

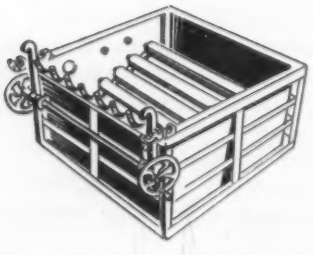
The SIMS Kettle is fabricated from *solid* stainless steel so it can not corrode around where fittings are installed. It is *steam jacketed* to eliminate the need of cooking or storage coils, so the maintenance cost is eliminated. Note that the bottom is slightly *conical* shaped for easy "ashing out" or cleaning. The mixer with its Stainless Steel shaft and propeller, is directly driven.

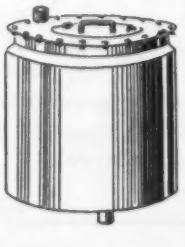
You can COOK or STORE in the same kettle if you like.

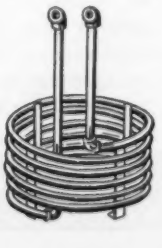
Both quality and workmanship is guaranteed by SIMS. Call us to discuss your problems with you . . . 20 years of "know-how" is at your command.

FABRICATORS **Sims METAL WORKS** SINCE 1928

WEST POINT GEORGIA







and is suitable for dyeing cotton and viscose process rayon in all stages of manufacture. It is recommended for shirtings, industrial uniform cloths, draperies, dress goods and other fabrics where good fastness to light and laundering is required.

"Ponsol" Red GLL Paste gives pink and red shades with an unusual degree of light fastness. It yields attractive self shades and is useful as a base for light-fast rose shades. It is recommended for upholstery fabrics, drapery materials and other use where excellent light fastness is essential.

E. I. Du Pont De Nemours & Co., Dyestuffs Division, Wilmington 98, Delaware.

For additional data, request item K-198, using business reply card on page 205, and specify product.

New Glycols Available

Three new glycols—butanediol-1,3; 2-methylpentanediol-2,4; and octylene glycol—have been announced.

Butanediol is a mild-odored, colorless liquid, miscible in all proportions with water and alcohol. Methylpentanediol is a colorless liquid with a mild hygroscopicity, retaining a constant moisture content over a wide-range of humidity. It is miscible with water; the lower alcohols, ethers, ketones and esters; chloroform; and ethylene dichloride.

Octylene glycol is a colorless, 1,3 diol of low volatility and limited water-solubility.

These new glycols are said to be good plasticizers and softeners for animal glues, casein, cork gelatin, polyamide resins and zein compositions. They are useful as coupling or blending agents for leather and textile oils, and as solvents for essential oils, natural gums and resins. They are also used as intermediates for alkyd resins and plasticizers for synthetic resins .

Carbide and Carbon Chemicals Corp., 30 East 42nd St., New York 17, N. Y.

For additional data, request item K-199, using business reply card on page 205, and specify product.

Wolf Textile Chemicals

Padasol is a sodium alkyl aryl sulphonate, used in the dyebath for dispersion of dyestuffs.

Solvacet is a mixture of esters and sodium alkyl aryl sulphonate, used as a solvent for acetate dyestuffs.

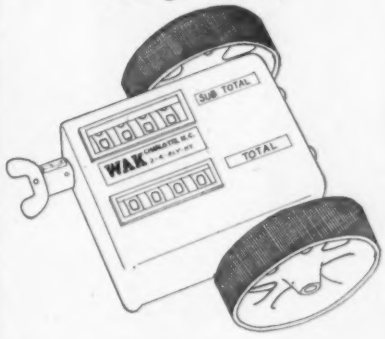
Dileine is an emulsified phenyl amine used on acetate dyed fabrics to prevent atmospheric gas fading.

Lomar is sodium salt of a condensed naphthalene sulfonate used as dispersing agent for pigment, dyestuffs, etc.

Jacques Wolf & Co., Passaic, N. J.

For additional data, request item K-134, using business reply card on page 205, and specify product.

Yardage Counter



This double-double wheel yardage counter is particularly useful in measuring short pieces of fabrics. Sub-total and total yardage is available at a glance. Reversible yardage counters are also available. WAK Industries, P. O. Box 3095, Charlotte 3, N. C. For additional data, request item K-253.

Device Levels Weight of Stock on Woolen and Worsted Cards

The development of an electronic device for installation on feed boxes of woolen and worsted cards to level successive weighings of stock, has been announced.

The basic action of this device is to determine the amount that each load in the weigh pan is over or under-weight as measured by the neutral position of the scale beam, and then to apply a corresponding correction to the next load. It is claimed that this has the effect of eliminating the downward trend in delivered weights usually caused by the decreasing amount of stock in the supply hopper, and it also smooths out the peaks between loads.

The Magnepoise can be installed on any feed, regardless of age or condition, in a short time, according to the manufacturer. The correcting assembly is mounted on the side of the feed and connected to the scale beam. The control mechanism may be mounted either on the side of the feed, or in any convenient remote location.

Average weights per dump are accurate to less than 1%, from full to empty hopper, the announcement said. Another advantage claimed for the device is that the weights delivered correspond exactly to the setting of the beam scale, thus permitting the feed to be set in advance for the desired weight.

Arthur G. Russell Co., Inc., Forestville, Conn.

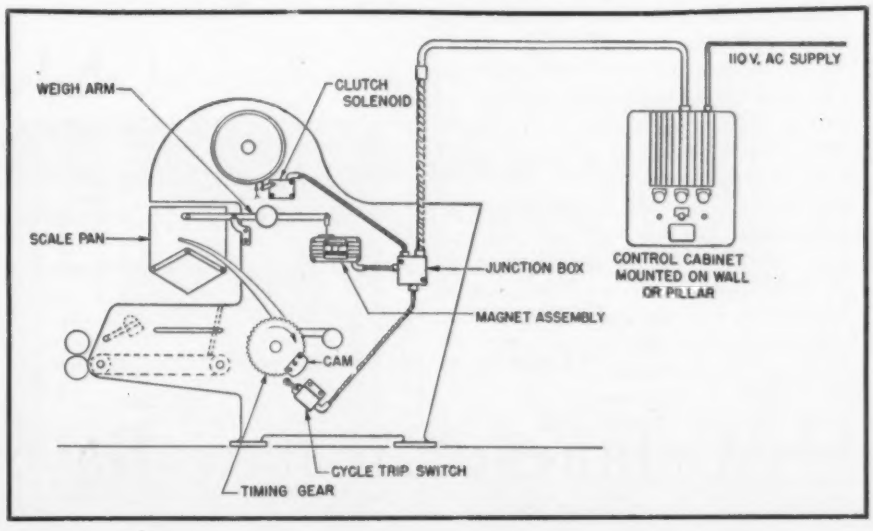
For additional data, request item K-227, using business reply card on page 205.

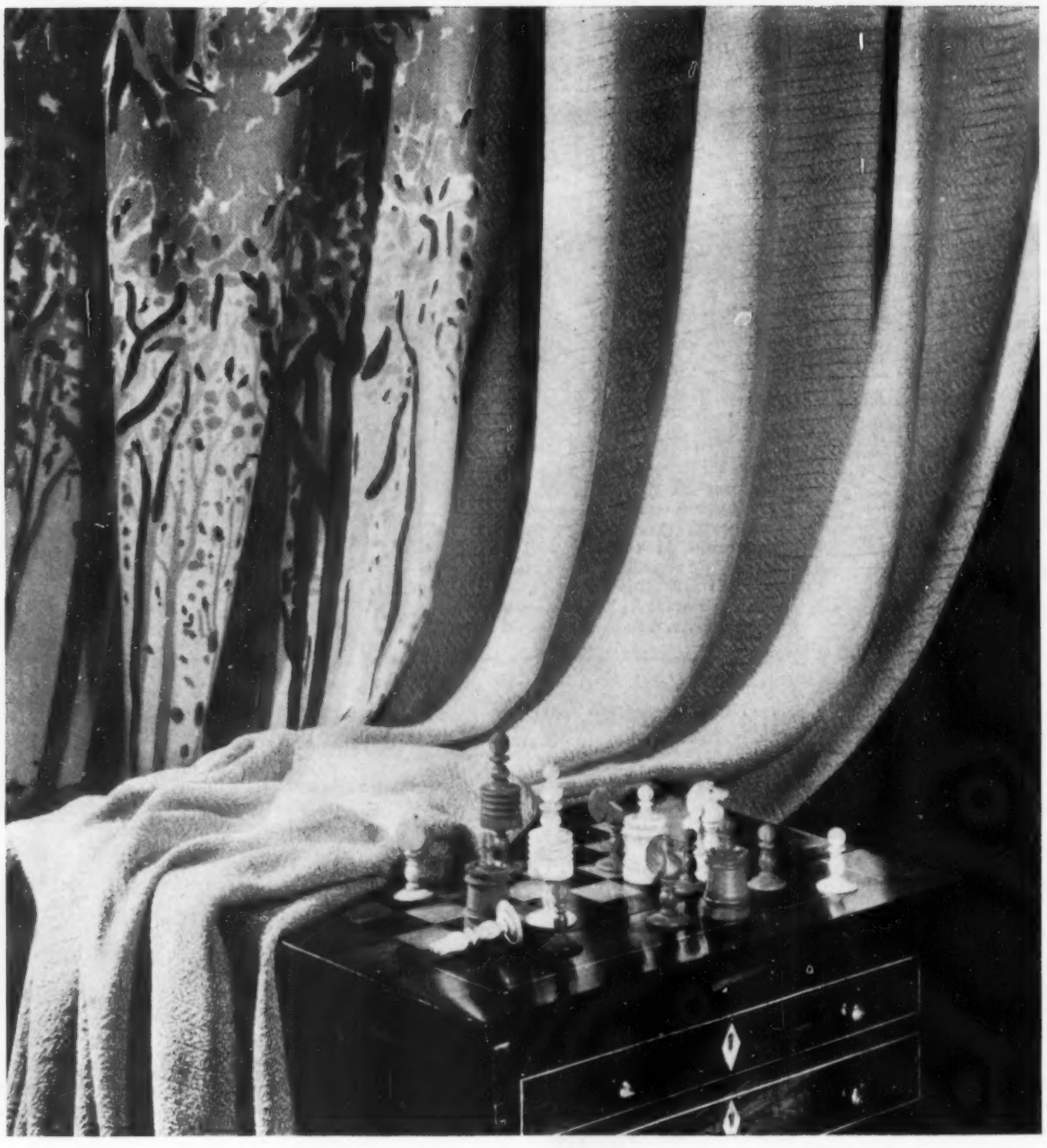
All Ball Bearing Drawing

A new high-speed, all ball bearing drawing has been developed and patented for both lap and can drawing.

It is described as practically vibrationless. Permanently lubricated and sealed ball bearings are used throughout. All weights are supported by outer races of bearings, en-

Schematic diagram of typical Magnepoise installation (Russell).





A first among important drapery fabrics...

CELALOOM*

A group of established, well-accepted drapery fabrics of 100% Celanese* acetate rayon staple fiber. Celaloom fabrics have a high degree of dimensional stability, are easily cleaned, adaptable to each decorative style . . . you will recognize all of these qualities in drapery fabrics made with a high percentage of Celanese staple fiber. Celanese Corporation of America, New York 16.

Celanese* Acetate Rayon Staple Fiber

*Reg. U. S. Pat. Off.

abling rolls to run freely at maximum speeds. Top and bottom rolls are self-aligning.

This drawing is adaptable to common or metallic rolls, may be specified for new frames, or ordered as replacement for existing equipment.

Ideal Industries, Bessemer City, N. C.

For additional data, request item K-230, using business reply card on page 205.

"Sandwich" Blending Unit

A completely automatic blending unit is designed to operate in conjunction with automatic weighing feeders.

The weighing feeders feed various stocks in exact predetermined amounts to a super picker. The picker is followed in the line of operation by a ceiling condenser, which deposits the stock on the series of revolving, stainless fluted rolls that form the top of the blending bin.

Design and construction is such that no metal parts can possibly loosen and mix in with the blend. The rolls revolve in a forward direction, conveying the stock to the far end of the unit.

When the stock reaches the far end of the series of rolls, a timing mechanism reverses every other roll momentarily, creating a series of conveyor rolls. Thus the stock is deposited on a temporarily stationary apron on the bottom of the bin.

This action is repeated and a sandwich blend is built up. When the bin is full, the apron moves forward toward breakdown rolls with retracting pins, which draw out and compress the mass of stock and feed it evenly to a picker for further processing.

The system, first developed for wool blends, has been found adaptable for cottons and synthetics.

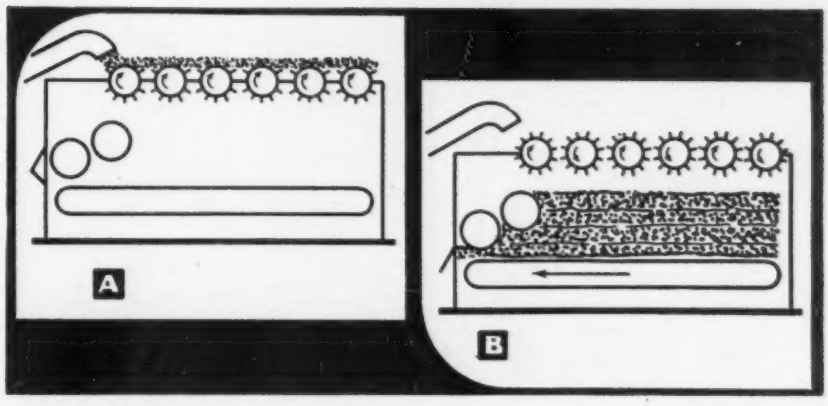
Proctor & Schwartz, Inc., 705 Tabor Road, Philadelphia, Pa.

For additional data, request item K-232, using business reply card on page 205.

Inverted Bucket Type Steam Trap

Designated No. 60, a new inverted bucket type steam trap is suitable for working pressures to 150 psi and temperatures up to 375° F. The trap can be furnished with various size seat orifices that will operate at any pressure below and up to 30, 75, 125, and 150 lbs.

The low-cost trap is small, compact, and is suitable for draining dry-



Sketch showing principle of operation of Proctor & Schwartz blender. A, stock being deposited on rolls. B, sandwich blend is built up.

ing cans, tracer lines, and drum dryers. A simplified piping arrangement is made possible by a choice of horizontal or vertical connections at either inlet or outlet. If horizontal inlet and outlet are used, the bottom inlet becomes a drain and the top outlet a test connection. The body and cover are made of high tensile cast semi-steel. The lever and bracket are made of stainless steel.

The Clark Manufacturing Co., 1830 East 38th St., Cleveland 14, Ohio.

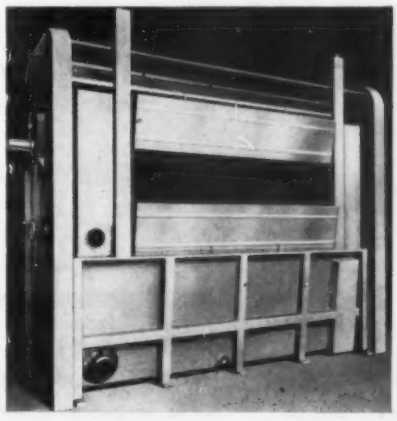
For additional data, request item K-271, using business reply card on page 205.

Wiesner-Rapp Equipment

A new line of stainless steel tight strand washers has been announced. These new functionally designed and ruggedly constructed washers will handle all weights of fabrics at maximum speeds, according to the manufacturer.

Simplicity of design provides easy threading up. The squeeze rolls have adjustable pneumatic pressure which is preset to meet varying pressure requirements. A conveniently located gauge outside the washer tells at a glance the pressure on the rolls. The rolls are standard and interchangeable for quick and easy replacement.

Tight strand washer (Wiesner-Rapp).



The washers are furnished with stainless steel enclosures that are equipped with full width uniquely designed doors. These doors, designed in two sections, are so arranged that an opening between the two sections of the door permits unobstructed visibility to the interior of the washer while in operation.

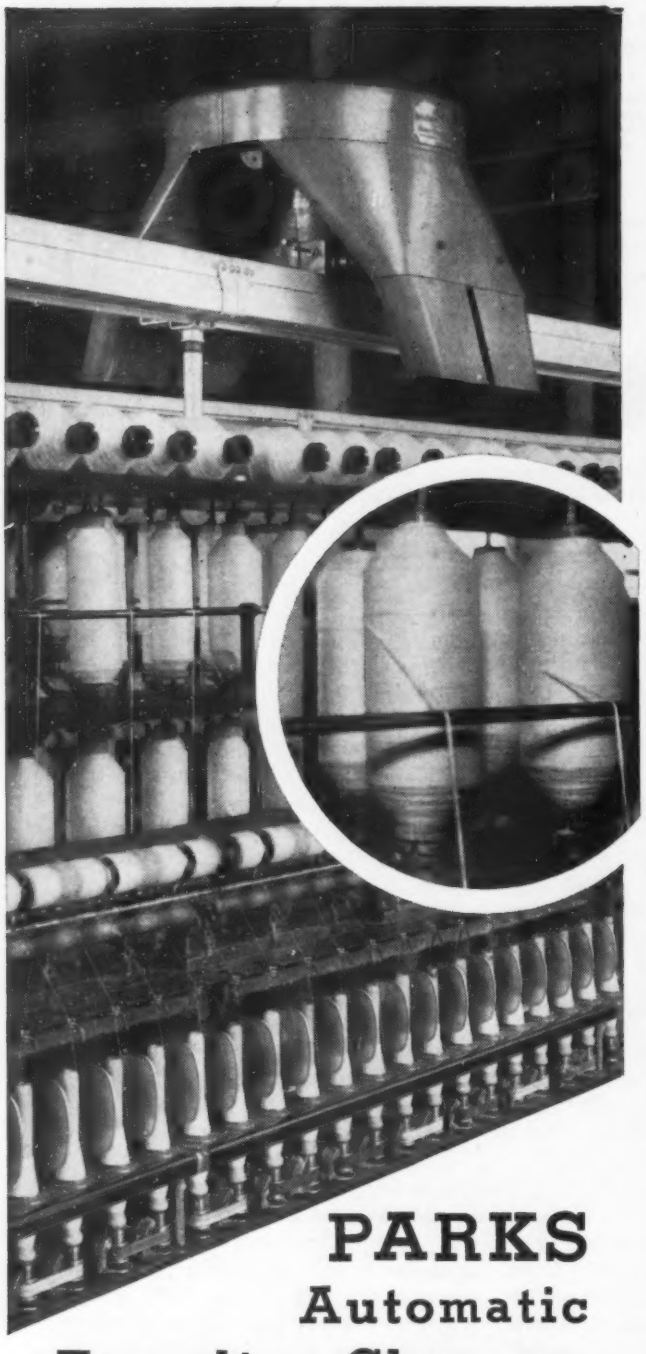
The machines are equipped with adjustable pin rails, making possible wear distribution over the rubber covered squeeze rolls.

Costly wrap-ups are eliminated in these washers by a special cloth tensioning arrangement which is adjustable for a minimum and maximum tension for various types of fabrics.

A rope-type squeezer has also been manufactured by this concern.

One of the many features claimed for this functionally-designed squeezer is the adjustable pneumatic pressure on the rubber rolls which is preset to meet the varying pressure requirements. A conveniently located dial tells at a glance the pressure on the rolls. The roller bearing take-up units on the rubber squeezer roll nearest the pneumatic cylinders are mounted on rails to permit the entire roller assembly to ride back and forth according to the thickness of the cloth and at the same time exerting constant pressure. This particular feature, which provides "give," increases the life of the rolls due to shock being taken by the pneumatic cylinders instead of the rubber, according to the manufacturer.

The two squeeze rollers are located side by side. By placing the rolls side by side, the extracted liquid is squirted straight down into the tank. Both squeezer rolls are standard



PARKS
Automatic
Traveling Cleaners

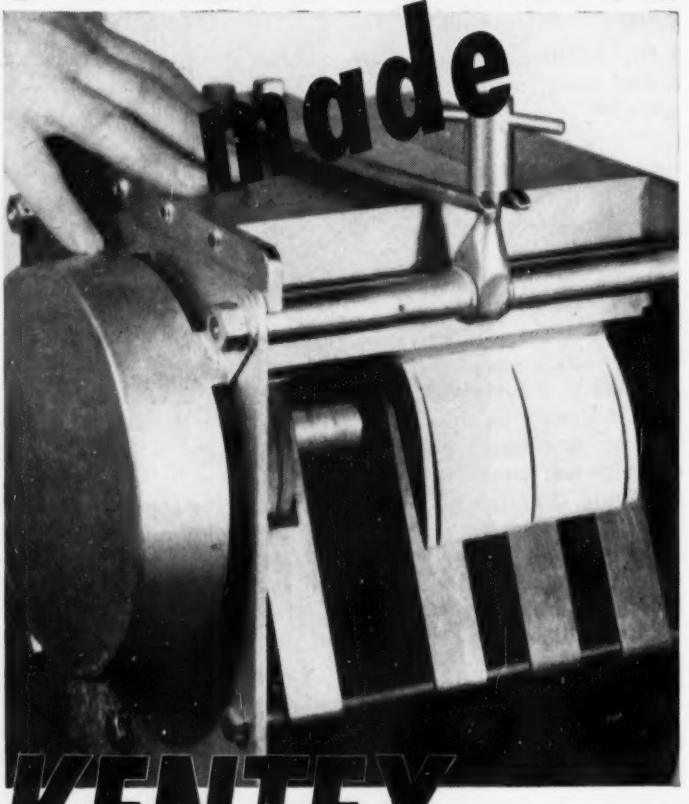
For spinning, winding, warping, spooling, and twisting. Units travel above the machines and blow them off at regularly fixed periods.

RESULT: Operatives tend more machines with less effort. Investment in Cleaners soon saved by reduced expense of cleaning, by increased production, and by improved quality of product. (Write for details.)

Parks-Cramer Company

Fitchburg, Mass. Charlotte, N. C.

PRECISION made



KENTEX Aprons

Kentex Aprons are made by skilled craftsmen who are apron-building *specialists* . . . with the experience, the most modern machinery and the engineering, "know-how" to build *more uniform* aprons at no higher cost. They are custom-built—of finest bark-tanned or chrome leather—to fit your *exact* requirements.

If you are looking for absolute uniformity between all aprons in the same shipment, and with your previous orders, let us send you free samples of KENTEX Precision-Built Aprons.

TEXTILE APRON COMPANY

EAST POINT, GEORGIA

J. B. KENNINGTON, OWNER

and interchangeable for quick, easy replacement.

Wiesner-Rapp Co., Buffalo, N. Y.

For additional data request item K-243 using business reply card on page 205, and specify machine.

Open Width Soaper for Wool Fabrics

A new "Fleet Line" soaping machine that may be used for soaping only one side of the cloth, or, by a tandem set-up, for soaping both sides has been developed. One of its distinctive features is a doctor blade which may be adjusted to regulate the amount of soap carried to the cloth.

The machine will handle all types of woolen and worsted fabrics at speeds of 20 to 60 ypm depending on conditions and requirements. At present the soap level is maintained manually, but it is expected that installations in the near future will incorporate automatic constant level controls.

Riggs & Lombard, Inc., Lowell, Mass.

For additional data, request item K-229, using business reply card on page 205.

Crimped Rayon Staple

A crimped rayon staple which is said to provide improved texture and appearance for certain types of fabrics has been placed on the market.

The new product can be used by itself, or it can be blended with wool, cotton or other types of rayon fibers, according to the announcement. The staple is used most effectively where a warm bulk-without-weight fabric is needed, as in the case of blankets.

American Viscose Corporation, 350 Fifth Ave., New York 1, N. Y.

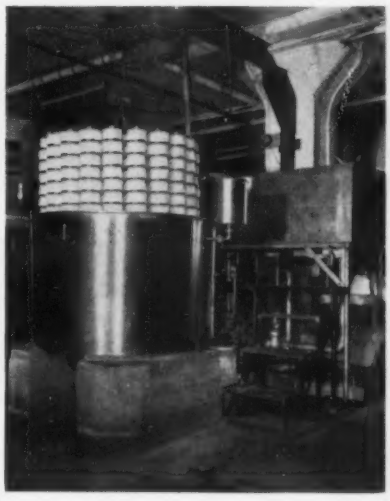
For additional data, request item K-231, using business reply card on page 205.

Continuous Crabbing Machine

A continuous crabbing machine has heavy gauge stainless steel tanks (one three-compartment and one single compartment) with combination overflows and drains and stainless steel tank rolls. All castings are made of metal which is rust proof and acid resisting.

Adjustable ball bearing spirals are used before the squeeze rolls which consist of three pairs of 12" diameter rubber covered rolls, and one pair of 16" diameter heavy duty squeeze rolls. Semi-squeeze rolls are equipped with a top roll lift-off device. Pneumatic loading is used on the heavy squeeze for uniform pressure.

Rayon Cake Dyeing Machine



In addition to positive even dyeing, the natural qualities of the yarn are preserved on this Model KRAKU rayon cake dyeing machine, according to the manufacturer. The machine is equipped with a special pump specifically designed for rayon cake dyeing. Standard Fabricators, Inc., 355 Walton Ave., New York, N. Y. For additional data, request item K-255.

The unit is equipped with tension rails and an adjustable tension device at the entering end, with a folding attachment at the delivery end.

Arlington Machine Works, Arlington, Mass.

For additional data, request item K-234, using business reply card on page 205.

Telescopic "Jackstacker" for High Stacking of Materials

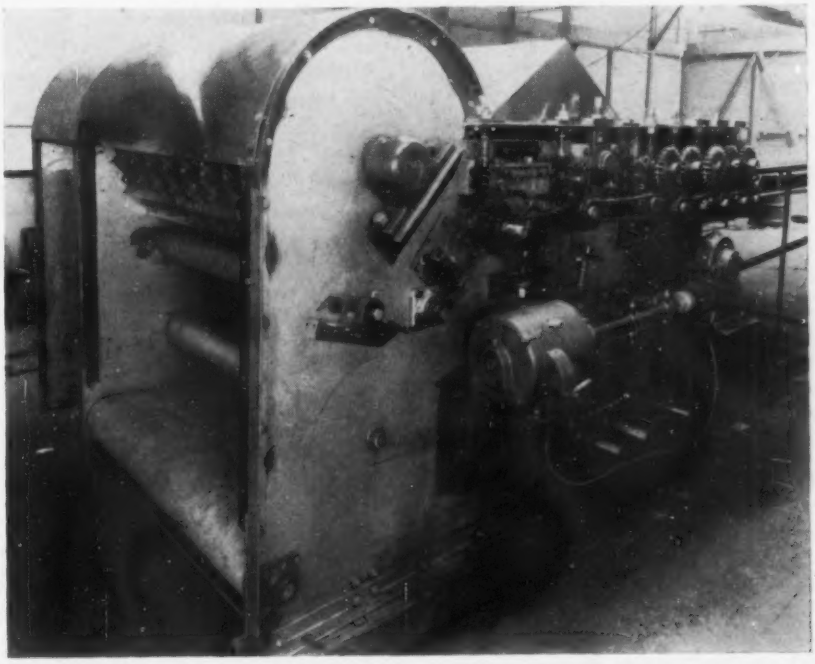
The telescopic "JackStacker," 100% electrically operated, with capacities up to 4000 lbs., is designed particularly for the movement and high stacking of materials on skid platforms, pallets, or in sectional bins. The telescopic feature allows passage through doorways and under trusses or other overhead obstructions.

Counterweighted, straddle-type, open-end base, and platform-type models are available for handling single or double-faced pallets as well as skids or platform-type containers. All controls are operated from the handle head with handle in vertical or any other position.

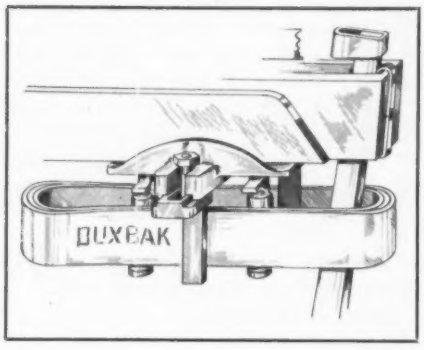
Lewis-Shepard Products, Inc., 274 Walnut Street, Watertown 72, Mass.

For additional data, request item K-197, using business reply card on page 205.

Fiber Decorticating Machine



This fiber decorticating machine was designed for the decortication of any fiber-bearing plant—wet or dry, bast or leaf. Production is reported to be approximately 10 to 12 tons of clean fiber in an eight-hour day. Fiber Industries, Inc., 298 Fifth Ave., New York 1, N. Y. For additional data, request item K-282.



Endless check strap (Schieren).

Endless Check Strap

A new type of endless check strap suitable for use on Draper looms and which is reported to be particularly successful on the higher speed looms, has been developed. The "Duxbak" endless check straps are made from pre-stretched oak belting leather. In addition, at both ends where the pickerstick strikes, extra reinforcing pieces of the same quality leather are inserted to absorb the shock of the picker stick and further prolong the life of the check strap.

The straps are mounted on the looms, using three-fingered friction brackets. The adjustment of the strap is very simple. Once the strap is inserted in the necessary friction brackets (one each side of strap), it is only necessary to adjust the center friction leg on either side to a light pressure, permitting the strap to slide freely in its holders.

Actually, the strap floats in the friction bracket and much of the checking is through absorption of the picker stick's energy by the use of the floating check. Pressure on the friction legs should be equal on both sides, to avoid pulling the straps sidewise.

Charles A. Schieren Co., Bristol, Va.

For additional data, request item K-157, using business reply card on page 205.

Apparatus Provides Automatic Application of Emulsion on Wool

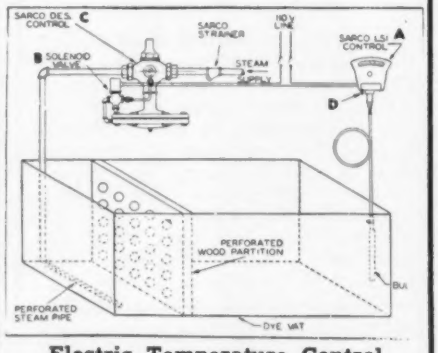
A new system for mixing and applying the desired amount of emulsion to wool has been developed.

Oil and water are heated in separate tanks and flow under pressure to a mixing chamber, where they form an emulsion. From the mixing chamber the emulsion flows under pressure to the spray nozzles located over the wool conveyor apron.

By means of needle valve controls, orifice meters, and manometers, any predetermined quantity of the emulsion (and the percentages of the oil and water therein) can be delivered to the wool. Needle valves control the flow of oil and water to the mixing chamber, and manometers indicate the rates of flow directly in gallons per hour.

Southern Welding & Machine Co., Charlottesville, Va.

For additional data, request item K-208, using business reply card on page 205.



Electric Temperature Control

Schematic diagram showing application of electrically operated temperature control on wool dye box. A temperature change of ½° F causes the control "A" to operate the solenoid valve "B." This solenoid pilot instantly actuates the valve "C" which snaps wide open or shut to control the steam supply. Finger tip temperature setting changes can be made by turning screw "D" while the control is in operation. The built-in thermometer continuously indicates the controlled temperature maintained. Application of the temperature control is not limited to dyeing. Sarco Company, Inc., Empire State Building, 350 Fifth Ave., New York 1, N. Y. For additional data, request item K-259, using business reply card on page 205.

Cook - P & N Machines

A new stainless steel slack washer is a self-supported unit with partitioned tank. The number of partitioned sections depends on the width of the machine and the requirements of the customer. The long squeeze rolls are rubber covered. The oval reel and carrier reel are all of stainless steel. Three sets of short squeeze rolls are rubber covered and adjustable, being wholly enclosed in stainless steel housings with sliding doors. Pressure of each set of short squeeze rolls is individually adjustable, while speed is variable with respect to the long squeeze rolls. Rolls may be equipped with manual pressure set or pneumatic presure set as desired.

A scutcher designed to meet the requirements of all types of fabrics has also been developed. Fabricated construction eliminates all heavy castings, thus permitting the use of stainless steel throughout the machine (including frames).

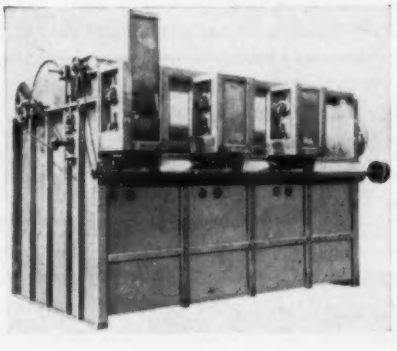
A new stainless steel tight rope washer—a self contained unit to handle all weights and types of fabrics has been announced. To synchronize speeds in range work, there is a compensator attached. All rolls are stainless steel or rubber covered. Features claimed for the totally enclosed washer include: double-action, free-sliding doors with no counterweights; pin rails with readily adjustable pins, stainless steel pot eyes and individual compensated motor drive or clutch pulley as required.

A new stainless steel saturator is a self-contained machine of rigid construction with edges flanged and hemmed to prevent dirt from falling into the liquor. The top cover, which may be either hinged to swing clear of the squeeze rolls or removed entirely, is designed to be watertight. The squeeze rolls may be rubber covered, stainless steel covered or a combination of a stainless steel roll and a rubber covered roll may be used successfully. Pressure is applied through pneumatic cylinders supported in stainless steel pivot brackets attached to the top of the machine.

Cook-P & N Machine Co., Inc., 365 Dorchester Ave., Boston 27, Mass.

For additional data, request item K-242, using business reply card on page 205, and specify machine.

Slack washer (Cook-P&N).



MANUFACTURERS—
DISTRIBUTORS—
SELLING AGENTS—

ATTENTION!

Financing production and distribution with maximum efficiency, and at a minimum of risk, is best accomplished through the financial and credit checking services of a strong factoring organization.

Increased sales volume without increased fixed invested capital, accelerates turnover and should yield greater profits.

Write today for details.

John P. Maguire & Company
INCORPORATED

FACTORS

370 FOURTH AVENUE • NEW YORK 10, N. Y.

Check Credits • Cash Sales • Absorb Credit Losses

Busy as you are...

Even though you are working like the proverbial beaver upon immediate hosiery demands, now is the time to plan ahead for meeting new and *different* future demands.

Knitting machines take many months to build. May we help you estimate your requirements, so that we, too, can plan ahead in filling your orders at the earliest possible moment?

SCOTT & WILLIAMS, INC.

Established 1865

MAIN OFFICE AND PLANTS: LACONIA, NEW HAMPSHIRE

Sales Office: Empire State Building, New York 1, N. Y. • *Divisional Offices:* High Point, North Carolina • Reading, Pennsylvania • Chattanooga, Tennessee

Modern Equipment & Processing Review (Knitting)

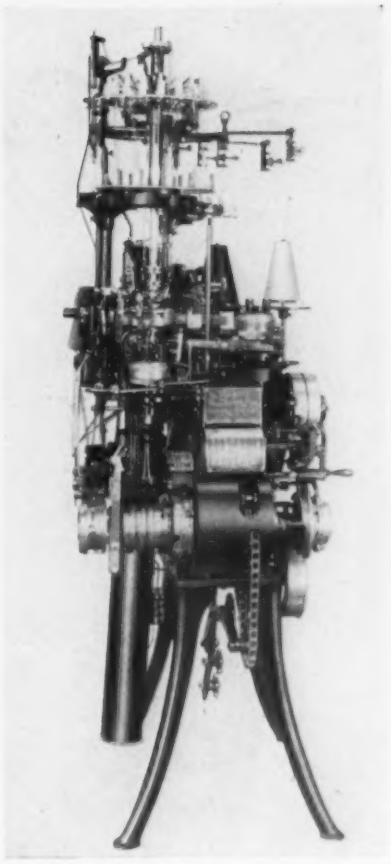
Machine Knits Boys' Fancy Socks

A new machine for producing boys' socks has been developed. The new unit will manufacture color and patterns in perfect proportion and in the complete ranges now offered by the Banner wrap-reverse machine used for men's hosiery.

The machine is a 3 1/4" cylinder, 120 needle, 24 gauge unit. With a simple preparatory step, the unit can be equipped to produce knee length hosiery for both boys and girls. The rate of production per 8-hour day is approximately 6½-7 dozen for an 8½ size.

The Hemphill Co., Pawtucket, R. I.

For additional data, request item K-317, using business reply card on page 205.



Banner machine makes boys' fancy socks (Hemphill).

New Hosiery Finishing Equipment

A hosiery finishing machine has been developed for the finish-boarding of all types of quality hose. It is specifically designed to recirculate approximately 90% of the air within the machine to eliminate "bone dry" finished hosiery by the specially directed hot-air draft, which avoids disturbing the setting of the welts and other parts of the stocking during the processing. This processing by hot, moist air is said to definitely eliminate static. The machine uses four sets of solid forms, twelve forms to a set, which are quickly and easily removable, thus making it possible to operate with four different sizes of stockings simultaneously. The production for an eight hour day with two operators is reported to be 260 dozen pairs of stockings. This machine also can be operated with one operator.

A portable leg form stand has been developed to provide a practical, economical and protected method of conveying and storing extra leg forms for pre-boarding and boarding machines. This stand is a welded fabrication of aluminum angle, and is mobile through the use of ball bearing swivel casters with semi-hard rubber tires. The forms are inserted between slots of a black semi-hard rubber composition, which actually grips and holds the forms, preventing their falling from the truck and protecting their edges. It holds a maximum of 72 forms.

A leg form straightener has been developed to facilitate straightening solid leg forms, either boarding or pre-boarding forms, which have become bent or twisted during operation. This device consists of an eccentric clamp, which grips the bottom of the form. An anvil shaped straightener equipped with handles is used to apply pressure at points necessary to straighten the form. A straight edge in the form of a pyramid is securely attached to the base in line with the clamped form for the convenience of checking the straightness of the form.

Turbo Machine Co., Lansdale, Pa.

For additional data, request item K-306, using business reply card on page 205, and specify equipment.

Portable leg form stand (Turbo).

Leg form straightener (Turbo).

-with Superb Precision

The "W & G" Machines are noted for technical excellence in maintaining, under a consistently high rate of production, those refinements in beautiful styling that set apart delicate creations from run of the mill garments.

The superb precision of "W & G" machines, for example, assures perfect stitching, strong, smooth and dependable, in keeping with smart appearance of the sheerest and frothiest lingerie.

Send for *your* copy of the "W&G" Machine Catalogue, Form 769.

Tricot Lingerie
Created by
TEXTRON
stitched almost exclusively
by W & G Machines.

Willcox & Gibbs

SEWING MACHINE COMPANY

214 WEST 39TH ST., NEW YORK 18, N. Y.

54 Gauge Machine By Lieberknecht

A 54 gauge, 32-section Lieberknecht full-fashioned hosiery knitting machine has been developed.

Experimental machines of this gauge, with automatic welt-turner, etc., were built early this year, and are now being offered to the general market of hosiery manufacturers.

Formerly, the finest machine produced by Lieberknecht was for the manufacture of 51 gauge hosiery.

Karl Lieberknecht, Inc., Reading, Pa.

For additional data, request item K-313, using business reply card on page 205.

Unique Attachment for Cloth Spreader

A new unit that enables the cutting-up industries to lay out piece goods face one way, is now being produced.

It is a trailer attachment which is designed for use in conjunction with the motor-driven CRA Electromatic cloth spreader, and which lays material face one way, in both directions on the table, from two pieces of goods.

Rethreading of the machine after each ply is cut is not required as the goods are spread from two separate carriages.

The trailer attachment is for flat-folded materials.

Cutting Room Appliances Corp., 45 West 25th St., New York 10, N. Y.

For additional data, request item K-314, using business reply card on page 205.

Stamping Process for Hosiery Identification

An indelible stamping machine, developed recently, prints required data on each stocking without heat, making it easy for the woman consumer to quickly match single stockings as regards color, weight and brand.

The machine is reported to utilize small detachable wheels which can be changed by the operator in 10 seconds when a different identification is required.

Automatix Inc., Chattanooga, Tenn.

For additional data, request item K-315, using business reply card on page 205.

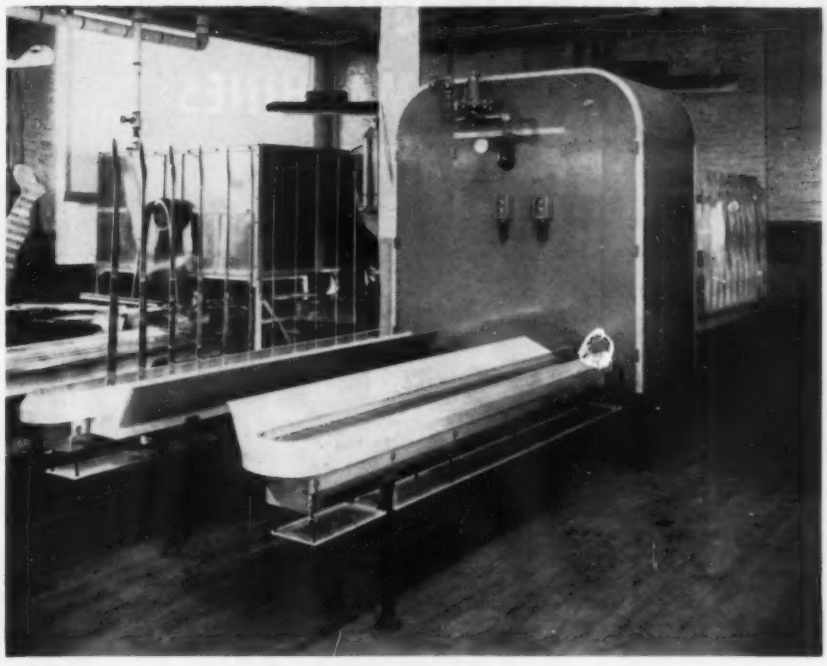
One Piece Flyer Blocks Made from Nylon Plastic

A flyer block made from nylon plastic is said to eliminate the need for lubrication in operating speeds as high as 15,000 rpm.

The one piece molded nylon blocks are available in three types and 2 colors (black and white). The use of two colors readily determines whether the blocks are wired for right or left twist. The bore is molded to fit the spindle. According to the manufacturer, the product will not break or bend out of shape if accidentally stepped on, and it is easily cleaned.

The M. J. McHale Co., 136 W. Market St., Scranton 8, Pa.

For additional data, request item K-311, using business reply card on page 205.



Machine for finish boarding of all types of hosiery recirculates 90% of air within the machine (Turbo Machine Co.).

Waterproof Pulley Lagging

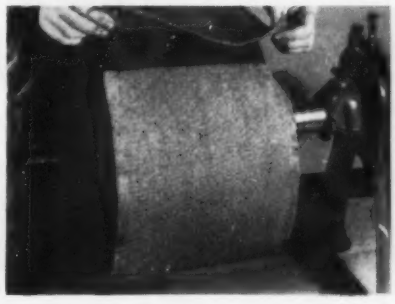
An all-purpose waterproof lagging that is quickly and easily applied without rivets, bolts, or heat, and that dries within 10 hours at room temperature, is on the market. According to the manufacturer, it is weather and corrosion resistant, unaffected by sulphuric acid, oxidizing agents, soaps, alcohol, petroleum products, etc. When dry it is odorless, tasteless, non-toxic and non-inflammable.

The lagging provides a frictional surface which increases transmission efficiency and belt life by eliminating belt slippage. It is equally suitable for crown split and flat pulleys and for use with leather, cord, wire-woven, or rubber belts.

Condersite Engineering Corporation, 2015 Chancellor Street, Philadelphia 3, Pa.

For additional data, request item K-112, using business reply card on page 205.

Waterproof pulley lagging (Condersite).



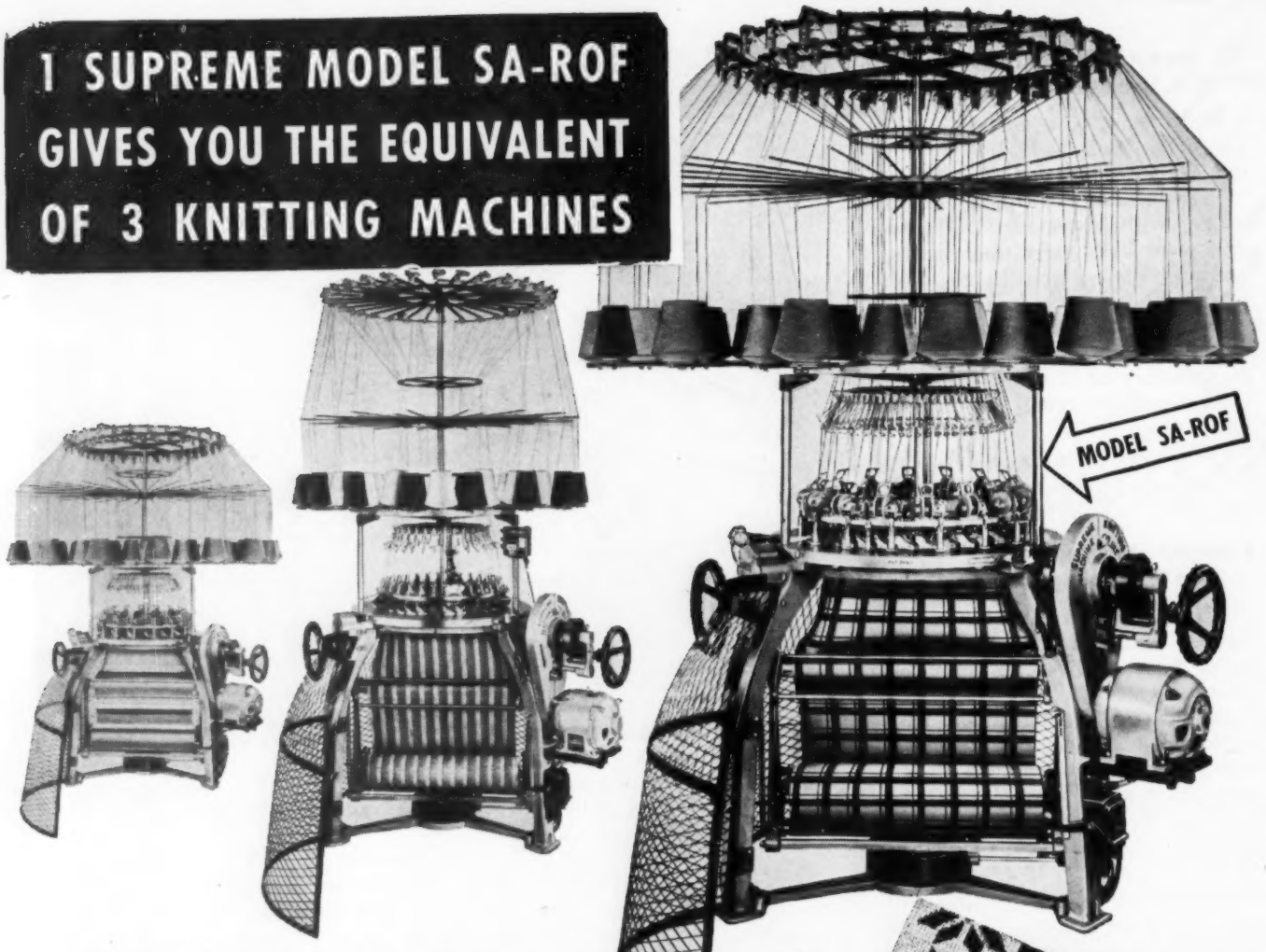
New Formula Reduces Bleaching Time

A 50% reduction in the time required to bleach knit goods in the Butterworth continuous bleaching system has been announced.

The saving is achieved by using a peroxide-silicate-caustic formula recently developed in the DuPont laboratories, the announcement said. Instead of treating goods with caustic and later with peroxide, the two stages are combined in a single run.

The equipment for the Butterworth bleaching range for knit goods requires only 44 feet in the bleach

1 SUPREME MODEL SA-ROF GIVES YOU THE EQUIVALENT OF 3 KNITTING MACHINES



Supreme's New Model SA-ROF gives you the combined advantages and the varied knitting ability of three knitting machines:

1. **A variable jersey striper**
2. **A "floatless" pattern wheel machine**
3. **A plaid and check knitter**

Depending upon your production plan or market demand, with the Model SA-ROF you can knit variable striped jersey with the stripes as deep as you want varied the way you want or – widely spaced patterns and designs with the floats neatly tied to the back of the cloth or–colorful plaids and checks.

The Model SA-ROF has these exclusive design features:

- Unique, stationary drum striping feeds and stationary yarn stand.
- Revolving cylinder and take-up.
- 24" diameter, 32 feeds. A minimum of 16 feeds knitting four colors.
- Choice of stripes, patterns or plaids.
- Quiet, concealed camming.

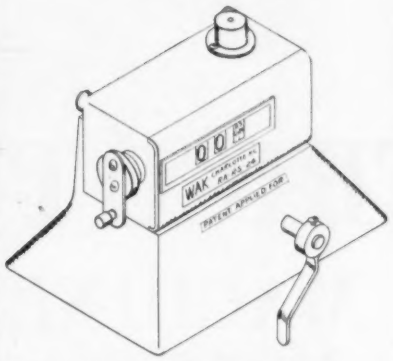
If you want to know more about the unusual fabrics and wider production range possible with SA-ROF, write for your copy of our new booklet, "Variable Stripes and Plaids Pay."

Mills Throughout the World Knit With Supremes

SUPREME
KNITTING MACHINE CO., INC.
105 JOHNSON AVE., BROOKLYN 6, NEW YORK, N. Y.

SK-113

Hosiery Counter



This counter is designed for use with hosiery inspection forms. The operator trips the lever as each stocking is stripped from the form. When 24 stockings or 12 pairs have been inspected, the counter rings a bell, which is built in, and records the number of dozen pairs on the large figure wheels. This feature enables the operator to pair hose in even pairs. WAK Industries, P. O. Box 3095, Charlotte 3, N. C. For additional data, request item K-324.

house. It includes an impregnating machine, steaming tube, "J"-box, slack washer and squeezer.

H. W. Butterworth & Sons Co., Philadelphia 25, Pa.

For additional data, request item K-320, using business reply card on page 205.

Brinton Developments

A circular knitting machine known as the Three Position Design Wheel Machine is available with 4 color yarn changers on alternate feeds, yarn changer ring, automatic left side, automatic tuck bars, pull down cams, free wheeling, take-up reel, and 64-bobbin table. The 24" machine is equipped with 24-feed 18 cut sinker top.

The three position wheel permits the elimination of floats on the inside of the fabric, the floating yarn being laid in on alternate needles. This allows the making of wide stripes without float stitches in jersey fabric.

A 14" 8-feed 20 cut sinker top machine is available complete for design wheels with tuck bars on all feeds and 4 color yarn changers on each feed. A 32-end bobbin table and 32-end electric stop motion with individual motor drive can be supplied. Dress goods are produced on this machine.

A 24" 32-feed, 18 cut sinker top Three-Position Design Wheel Machine designated Style S.T.W. has been announced. The machine is complete with pull down cams, plain left side, new style frame, individual motor drive and 32-end bobbin table. An electric stop motion is supplied with this machine.

H. Brinton Company, Kensington Ave. and M. St., Philadelphia 24, Pa.

For additional data, request item K-310, using business reply card on page 205, and specify machine.

New Stop Motions for Circular Machines

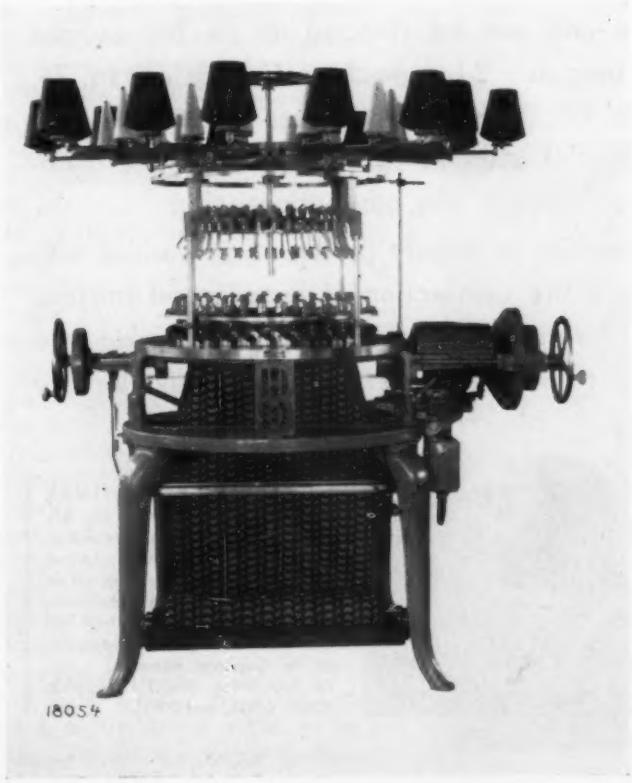
Three stop motions for circular knitting machines were announced by one firm during the year.

An electrical unit designed for the Scott & Williams Model HH hosiery Machine, automatically stops the machine when an end runs out or a break occurs at the cone. It also stops the machine when knots, slubs, etc., appear.

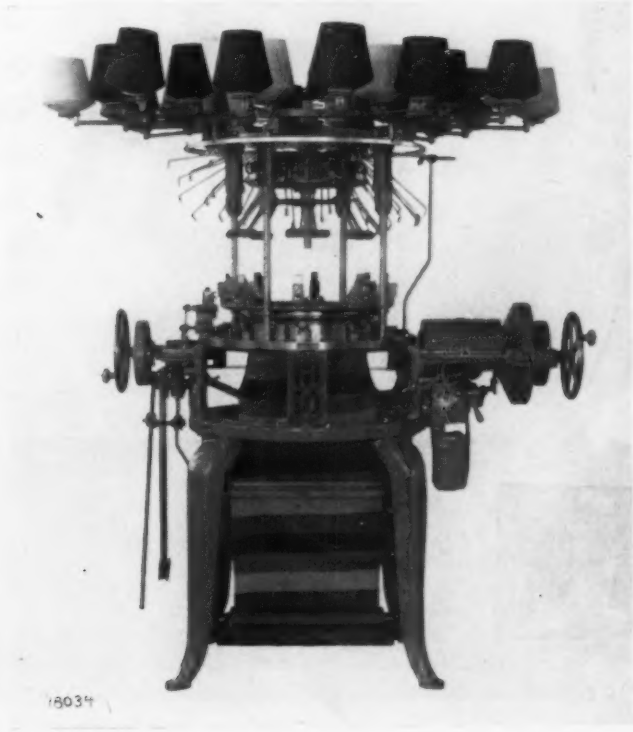
Another device was developed for use in conjunction with the stop motion on the Komet machine. This easily installed apparatus instantly stops the machine when a break occurs in the rubber yarn, preventing waste.

Prevention of complete press-offs on jacquard knitting machines is the purpose of the Sentinel electric press-off detectors with panel box indicator. Six electrically operated detectors are attached to existing screws underneath the knitting machine. When

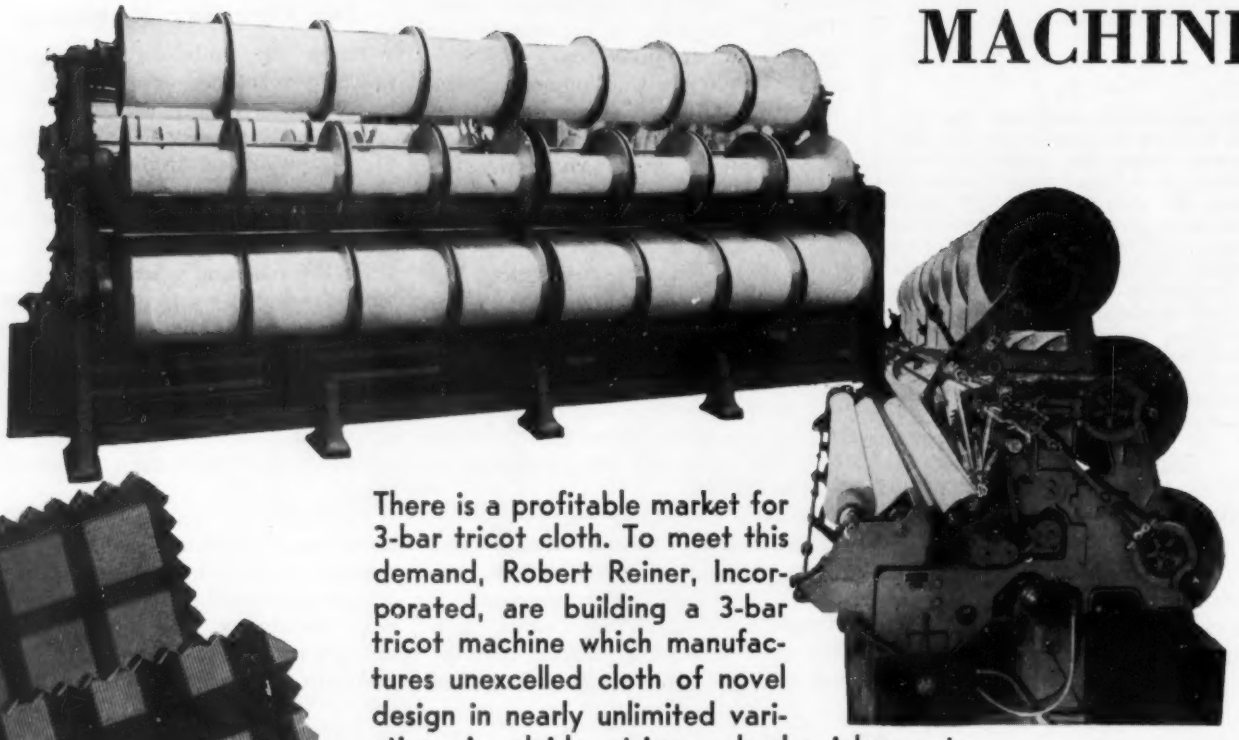
Style S.T.W. machine (Brinton).

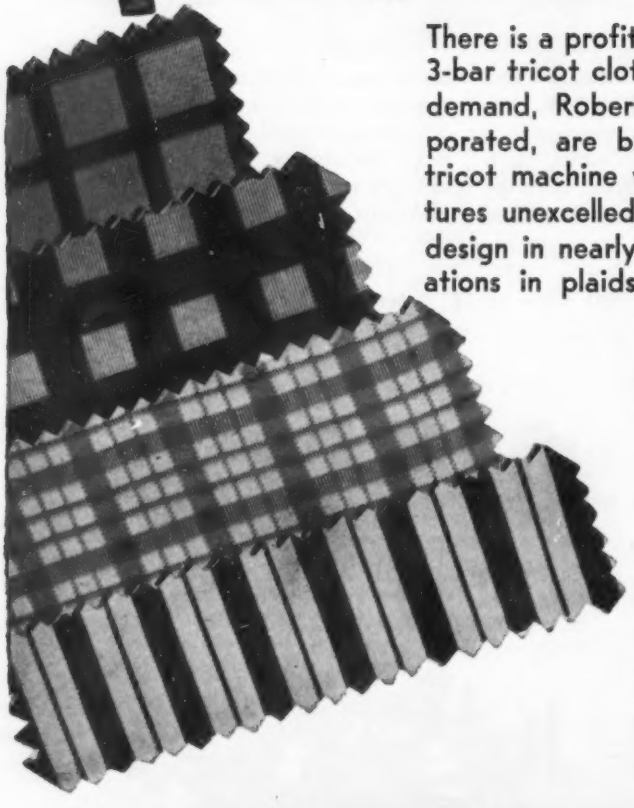


Front view of 14" 8-feed 20 cut sinker top machine by Brinton.



Here is the *Reiner* 3 BAR TRICOT MACHINE





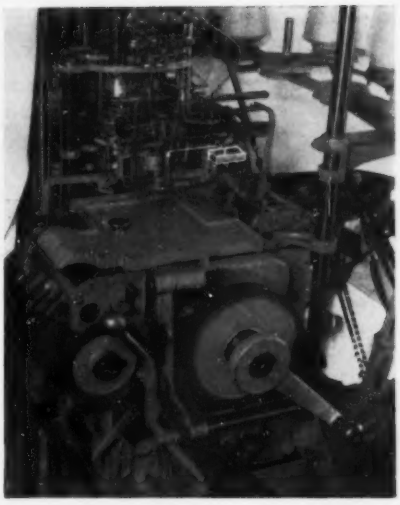
There is a profitable market for 3-bar tricot cloth. To meet this demand, Robert Reiner, Incorporated, are building a 3-bar tricot machine which manufactures unexcelled cloth of novel design in nearly unlimited variations in plaids, stripes, checks, inlays, etc.

This 3-bar tricot machine runs at 320 courses per minute and can be stepped up to 360 courses when used as a 2-bar machine. Gauges are 14, 24, 26, 28, 32. Chain link or pattern wheel drive. The machine takes spools up to 21 inch flange diameter, or those of any conventional size.

This machine is already producing at various mills to the entire satisfaction of experienced knitters. Those interested in this profitable market are invited to write for details. Early deliveries are assured.

ROBERT REINER INC.
550-556 GREGORY AVENUE
WEEHAWKEN, NEW JERSEY
FOUNDED IN 19

10 MINUTES FROM TIMES SQUARE. Take Bus Nos. 61, 67, 167 from the Times Square Public Service Terminal at 260 West 42nd Street, New York City. Get off at Pleasant Avenue, Weehawken, New Jersey. From there turn left and walk through the underpass up to Gregory Avenue . . . . . TELEPHONE: UNION 7-0502, 0503, 0504, and 0505.



The attachment shown here stops the machine instantly upon the occurrence of a break in rubber yarn (Stop-Motion Devices).

a press-off occurs, the detector nearest the damage snaps up instantaneously, stopping the machine. The operator then presses the button on the panel box and a light reveals the location of the press-off. A slide switch at each light enables the operator to disconnect any one detector, leaving the rest of the stop motion in operation.

Stop-Motion Devices Corp., 1471-77 Fulton St., Brooklyn 2, N. Y.

For additional data, request item K-325, using business reply card on page 205, and specify device.

Improved Stocking Counter

An improved stocking counter, simple in design and construction, forms an efficient means for counting stockings in dozen units. The dozen indicator disk may be set to lock automatically at any point between 1 and 10, and cannot be released except by resetting the disk to the zero position, which removes the danger of having more than the desired number of dozens in any particular bag.

This improved counter requires only the light touch of a finger for its operation as the stocking is removed from the examining form, and is automatically locked after the 24th stocking has been passed over the index pin. The dozen thus counted may then be tied, dropped into the bag, or other receptacle, and the counter released to continue counting the next dozen merely by the touch of a finger on the release lever at the side of the counter.

The counter may be used with equal ease by either right or left hand operation; and being mounted on a swivel ratchet, is readily and easily adjusted to suit the individual operator.

Textile Machine Works, Reading, Pa.

For additional data, request item K-305, using business reply card on page 205.

New Fork Truck

A battery-operated fork truck, named the Transrider, is said to make available to industrial truck users for whom added speed is not an advantage, a lower initial investment without sacrificing results.

With a telescopic lift mechanism, the Transrider is able to raise its load to 130 inches, despite having an overall height of only 83 inches for clearance through standard box car and factory doors. Single lift before the telescopic uprights are extended is 66 inches.

Automatic Transportation Co., 149 West 87th St., Chicago, Ill.

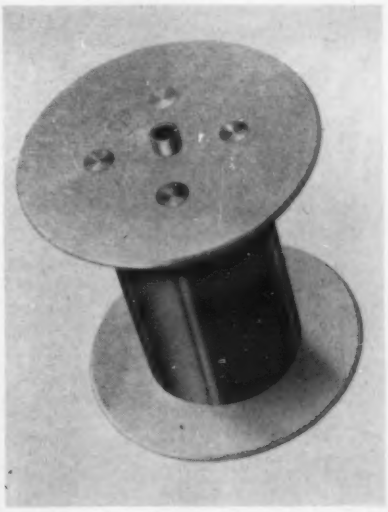
For additional data, request item K-204, using business reply card on page 205.

New Solenoid Valves

Two solenoid valves have been added to the line available for handling steam, hot or cold water, gas, air, gasoline, and oil. One valve is known as the Normally Open Solenoid Valve and is identified as the Series No. 5000. It is a directly operated solenoid valve built for 150 lbs. line pressure as standard, and is available both in iron and bronze construction.

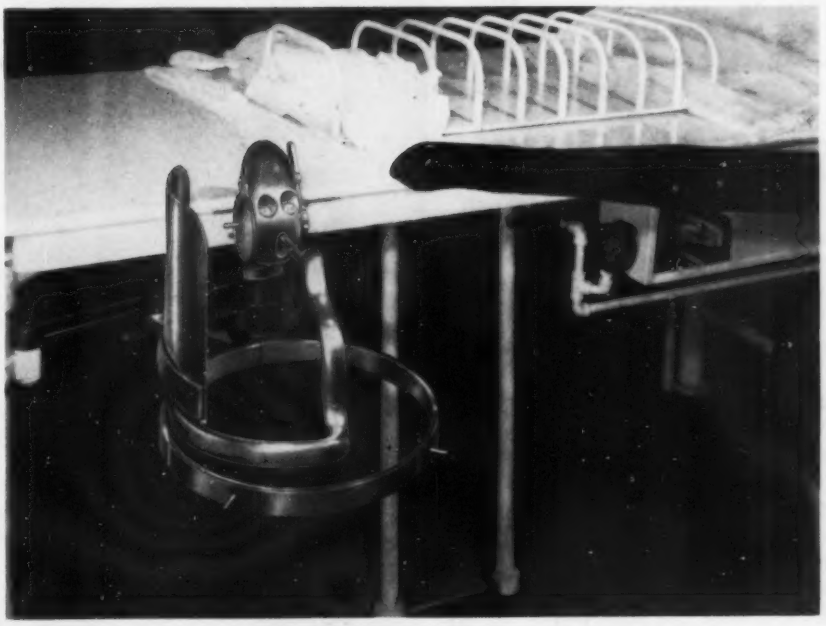
Another valve is designated as the Series No. 6000 Normally Open Emergency Solenoid Valve and is intended for emergency and/or safety requirements. When the controlling element functions and causes the solenoid to be energized, the valve closes and stays closed as long as

Take-Up Shaft



This new take-up shaft has a molded barrel and aluminum alloy heads. It has been especially designed to withstand the extreme pressures of nylon and similar yarns, the manufacturer claims. Cloverleaf-Freeland Corp., Hazelton, Pa. For additional data, request item K-326.

New stocking counter (Textile Machine Works).



New Glosstex trucks for handling hosiery (Daniels).

there is a pressure above three pounds on the inlet side, regardless of whether or not the solenoid continues to be energized.

In addition to the valves, a Type "S" rotary pressure joint for flexible hose connections has been introduced. The joint is designed for use on heating and cooling rolls which have considerable lateral movement and are so constructed that the application of suitable supports for the standard rotary pressure joint is difficult or impossible.

The Johnson Corporation, 805 Wood Street, Three Rivers, Mich.

For additional data, request item K-133, using business reply card on page 205, and specify type of valve.

Vinyl Treated Canvas Reduces Pull Threads

A new vinyl treated canvas, designated "Glosstex," is being used to line stands, baskets, and trucks for the textile industry. According to the manufacturer, the fabric has a smooth, glossy surface that makes it particularly suitable for handling such textiles as sheer hosiery.

Characteristics claimed for Glosstex include: It cannot be penetrated by oil or grease; it does not chip or splinter; it will not absorb water or dirt; it is not susceptible to sharp edged holes; it is washable and may be easily wiped out with a damp cloth; it will not absorb dyes; it does not deteriorate in heat up to 300° F and does not shrink.

Aluminum color is standard. Other colors and neutral are available upon specification.

In addition to stands, baskets, and trucks lined with Glosstex, the manufacturer offers the fabric by the yard in widths up to 48 inches and in three different weights. It is recommended for work table and bin covers, etc.

C. R. Daniels, Inc., Daniels, Md.

For additional data, request item K-309, using business reply card on page 205.

Corrosion Resistant Coating for Wooden Tanks and Floors

A new type of corrosion resisting coating for wooden tanks, floors, racks, tables, fume hoods and miscellaneous equipment is available.

Designated "Carbo-Kote," the product is said to resist most acids, such corrosives, the chief exception being nitric acid; also sulfuric acid over 45% concentration.

Carbo-Kote "sets" by polymerization at room temperature and, according to the manufacturer, the coatings are inert to further breakdown after being formed. It can be applied with an ordinary paint brush at ordinary temperatures.

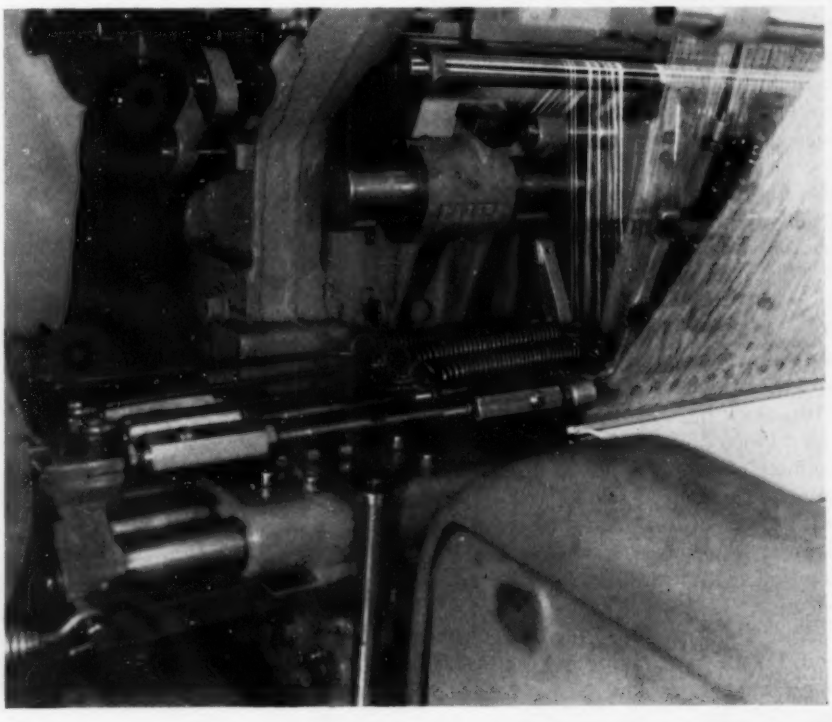
Carboline Co., 502 N. Taylor St., St. Louis, Mo.

For additional data, request item K-239, using business reply card on page 205.

New Three-Bar Tricot Machine

A three-bar tricot machine which manufactures cloth of novel design in nearly unlimited variations in plaids, stripes, checks, inlays, etc., is available to the knitting industry. The machine runs at 320

The pattern wheel drive on the new 3-bar tricot machine by Reiner.



The $500 Surplus that Washed Away

We sat listening to the town board members at their quarterly meeting.

Things were pretty dull until the Clerk announced there was a $500 surplus in the town treasury. Someone suggested the purchase of bleachers for the baseball field.

Jim Harkins objected.

"That's our flood control fund," he said. "The little stone dam hasn't been repaired for years."

The board members laughed at Jim. They said the creek hadn't overflowed in 15 years. Besides the baseball field was more important, and the money could be spent in building new bleachers.

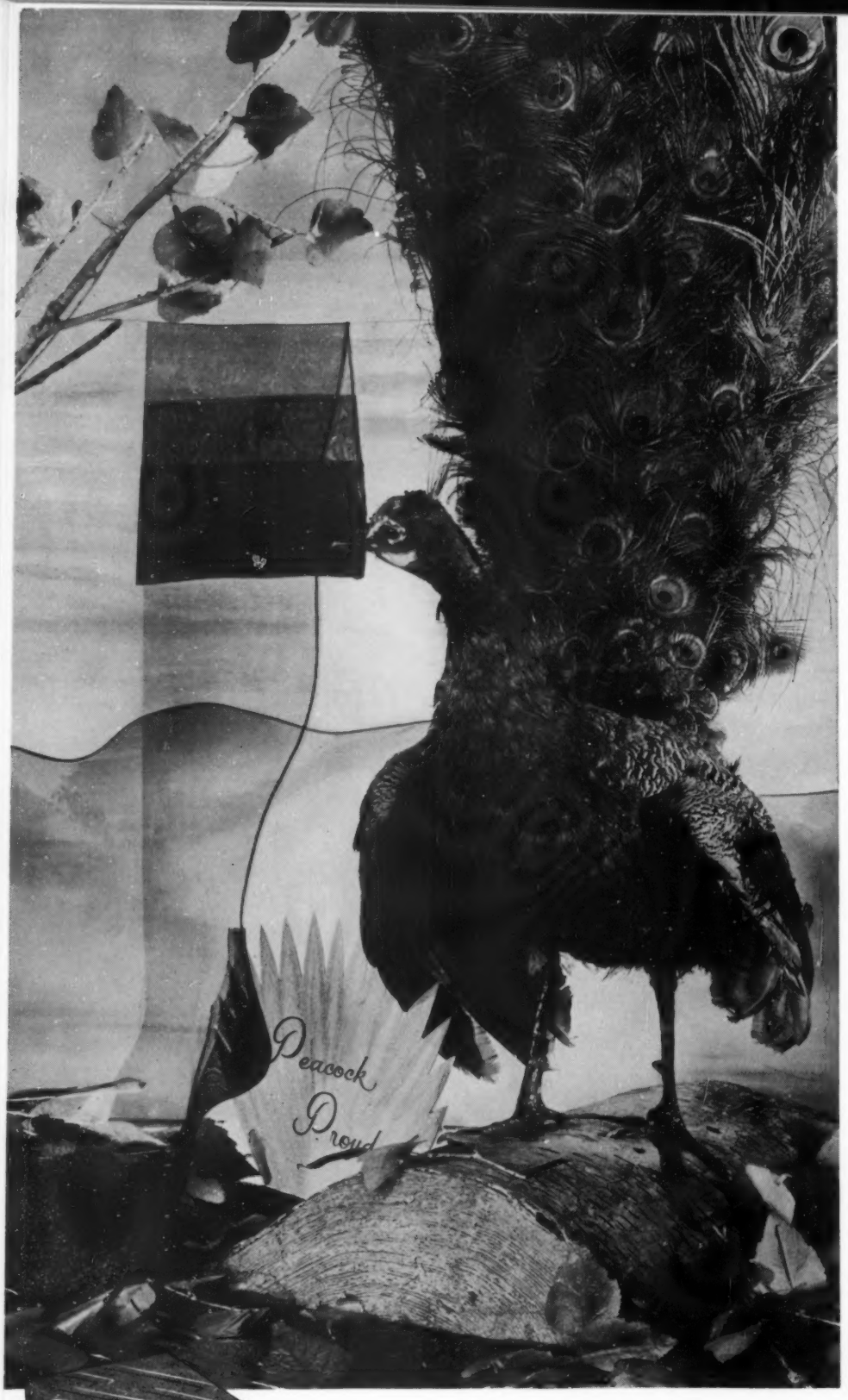
A month later, a flash flood hit our town. The little dam crumbled under the weight of the water in the swollen creek. All the homes and streets in the hollow were flooded. The baseball field and the new bleachers were washed away.

The town board is agreed that never again will money needed for essential purposes be spent so casually.

Take a look at your last Financial Statement. Do you really have the money that you charged off for Depreciation in the past years? Is it part of your "current" assets . . . or is it earmarked as a separate fund under "fixed" assets?

Write today on your business stationery for your copy of "Good Housekeeping in Business" —a pamphlet which presents what we believe to be a *logical* basis for handling depreciation money. We will be glad to send it to you.

TEXTILE MACHINE WORKS
READING, PENNA.



Textile
SPRING-BEARD NEEDLES

For Full Fashioned and Warp Knitting

For extra elasticity

When you check a Textile Spring-Beard Needle for its elasticity, you'll discover it has a high degree of resiliency to withstand pulling of yarn and constant pressing motions. Made of a special steel formula, possessing a superior temper and smooth finish, a Textile Spring-Beard Needle measures up to the most exacting tests.

From the rolling mills to package, each Textile Spring-Beard Needle undergoes rigid controls — automatic and electronic — to assure top quality in performance. All this adds up to improved knitting results for you.

TEXTILE MACHINE WORKS
Reading, Penna.

courses per minute and can be stepped up to 360 courses when used as a two-bar machine. Gauges are 14, 24, 26, 28, and 32. Chain link or pattern wheel drive can be furnished. The three-bar machine takes spools up to 21-inch flange diameter, or those of conventional size.

Robert Reiner Inc., 550-556 Gregory Avenue, Weehawken, N. J.

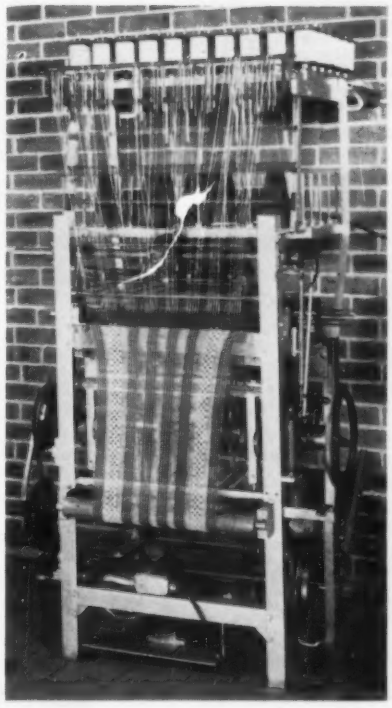
For additional data, request item K-308, using business reply card on page 205.

Knitting Loom Features Pattern Wheel Control System

The most important improvement incorporated in a new knitting loom is in the pattern control system. One pattern wheel is provided for filling and one for warp. A single adjustment produces a change in the pattern. A change on the pattern wheels requires loosening a locking screw and repositioning the pattern block.

The knitting loom is 40 inches wide, 45 inches deep, and it is 72 inches high with the creel bobbin feed in place. It is belt and chain driven from a one-quarter horsepower motor. Large size latch needles are used to knit an interconnected chain in the warp. The warp needle bed spacing is one-tenth of an inch. Two sets of warp fingers permit interlacing the warp chains, and these fingers may be traversed laterally for one and one-quarter inches.

The fingers are controlled by the warp pattern wheel. This makes it possible to produce a fabric without a filling. Filling is fed to the warp through tubes which are four and one half inches long. The tubes can be inserted into any of four filling bars that have adjustable spacing for the tubes. A four and one half-inch filling traverse is possible.



Knitting loom (N. C. State College).

The pattern is controlled by two wheels, and the filling pattern wheel can knit up to 24 courses before a repeat. The warp pattern wheel is similar to the filling pattern wheel, and it rotates on a shaft above and slightly behind the warp fingers. Twelve courses can be knit in the warp before a repeat is necessary.

Each pattern block is inserted in a dove tail groove after loosening a center locking screw. It is locked in place by tightening the screw which is provided for the purpose. The yarn is fed from bobbins or spools which are placed in the creel on top of the machine. The upper level of the creel feeds the warp, and the lower level feeds the filling.

School of Textiles, N. C. State College, Raleigh, N. C.

For additional data, request item K-301 using business reply card on page 205.

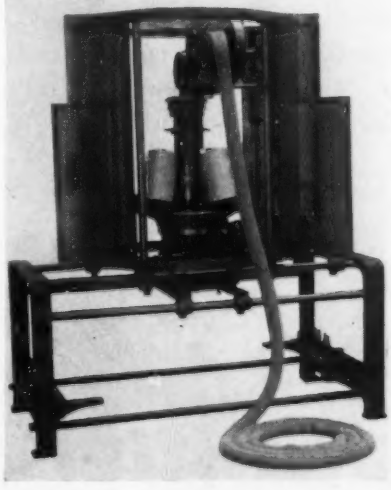
Special Purpose Knitters by Fidelity

Three different types of special purpose knitting machines presently being used for the manufacture of knitted covers on both hose and wire have been placed on the market this year.

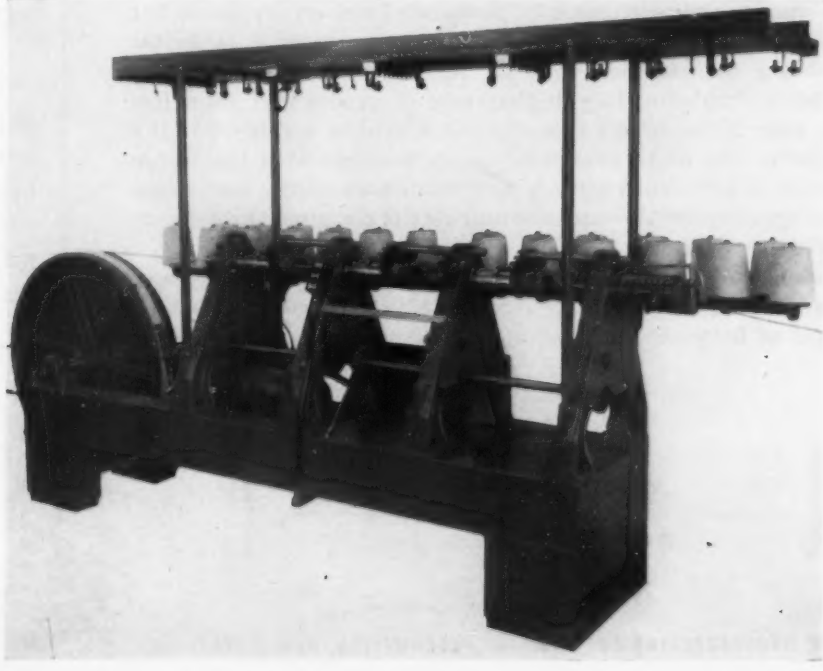
One model is producing tubing at a speed of over 2500 feet per hour. It can produce three concentric layers of knitted tubing at the same time and at this high speed.

The manufacturer states the reason for this high speed lies in two

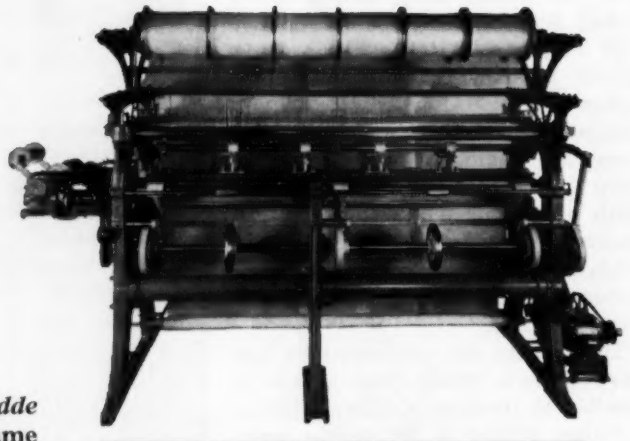
Special purpose knitting machine for the manufacture of covers on hose (Fidelity).



Special purpose knitting machine used for covering wire (Fidelity).



Are you making LACE EDGINGS?



For Better Quality and Higher Production, investigate this machine

Finer, tighter lace edgings can be produced on the *Kidde* Knitter than were possible on prewar machines of the same type. Five or six guide bars can be used to produce edgings of a quality that are much in demand. Even on six guide bar work production speeds of 150 courses per minute or better are being maintained.

That's a substantially higher rate of production than has ever been attained on this type of machine before—but it's *typical* of the high, *sustained* speeds possible with the *Kidde* Knitter. A new drum drive, a new motion on needle bars make these speeds possible—and the machine is designed throughout to withstand them.

You'll find the *Kidde* Knitter adaptable to practically any type of yarn, thread or elastic—quickly and easily set up for simple or intricate patterns.

Use the Kidde Knitter on these fabrics too

ELASTIC FABRICS for corsets, girdles, brassieres. DRESS FABRICS. DISH CLOTH MATERIALS. CURTAINS. NARROW FABRICS: edgings, braidings, laces. SHOE CLOTH. KNITTED OUTERWEAR FABRICS for sweaters, polo shirts.

Write for free literature on the Kidde Knitter—or, better still, see for yourself what it can do. A machine is in operation at our Bloomfield plant—write for an appointment for a demonstration.

The word "Kidde" is the trade-mark of Walter Kidde & Company, Inc., and its affiliated companies.

KIDDE MANUFACTURING CO., INC. • BLOOMFIELD, NEW JERSEY

factors: (1) The use of the multi-feed principle to a greater degree than has ever before been employed in small diameter circular knitting; (2) the use of an exceptionally high speed knitting head.

The knitting head is specially designed and sturdily constructed of high strength special alloy steels so that it can rotate at a high speed.

These new knitters are reported to be extremely versatile, and they can handle tubing ranging from approximately 1/16" up to 4".

Fidelity Machine Co., Inc., 3908 Frankford Ave., Philadelphia 24, Pa.

For additional data, request item K-304, using business reply card on page 205, and specify machine.

New Supreme Machines

Model SA and SA/ROF machines are latch needle, sinker top, jersey and pattern wheel circular knitting machines. They are automatic variable stripers based on a new concept, according to the manufacturer. The cam raceway, drum striping feeds and yarn rack are stationary, while the cylinder and take-up revolve.

The camming mechanism for changing colors is quiet and concealed, and a simple, short chain will give any type of stripe selection desired. The chain consists of only two type links which count each revolution made by the cylinder and institute changes on all striping feeds. The arrangement of pins and holes in the individual drum on each striping feed predetermines the color to be selected when the drum revolves.

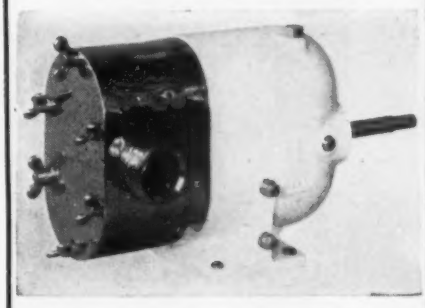
The model SA automatic variable striper is especially adapted for chest blazer stripes. The production record of this model is 24 revolutions per minute, 8 to 10 lbs. of cloth per hour on 4-color variable stripe jersey.

The model SA/ROF, using 3-level, unitary pattern wheels will produce such fancy fabrics as knit and tuck cloth, both with variable stripes. A complete range of unique plaids, and variable striped jersey fabric may be produced on this machine. The plaid fabrics are knit on the "floatless" lay-in principle, the float being laid-in or tied to the back of every other wale. If desired, the stretch of the cloth may be eliminated and the texture then approximates woven cloth.

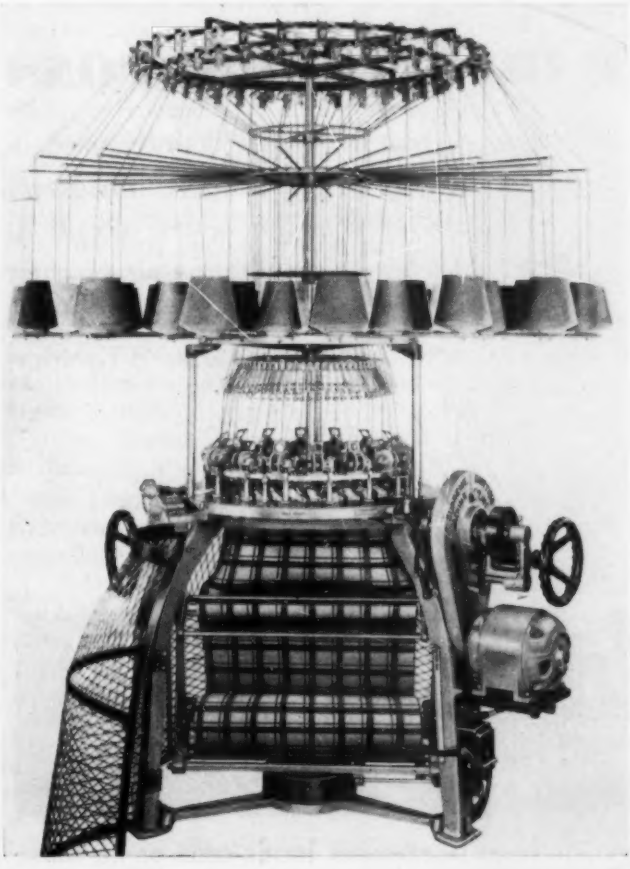
When the model SA/ROF machine is equipped for fancy fabrics, there are 32 feeds with patented knit and welt cams; the feeds are stationary. Four-color drum stripers are provided with automatic controls for single color selection. All 32 feeds can operate with 3-level, unitary pattern wheels, and knit, tuck, and welt needle positions are available on all feeds without changing pattern wheels.

Improvements have also been made on the Model MJ jersey machine developed for the underwear

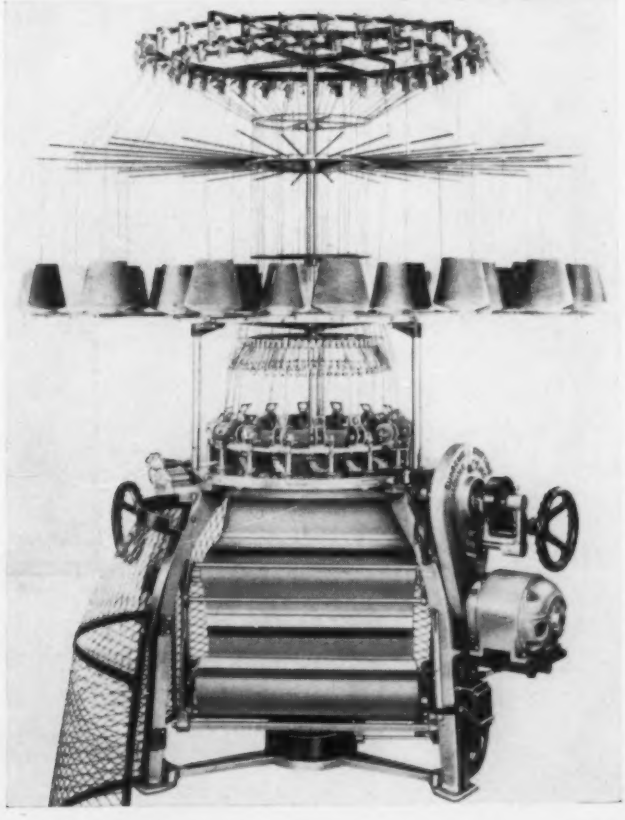
Stainless Steel Pump



Designed to eliminate all internal threads, this stainless steel pump for handling dyes, chemicals, etc., is of rigid ball bearing construction with positive tolerance control. It can be easily disassembled for cleaning since it has a minimum of removable parts. Waterous Co., St. Paul 1, Minn. For additional data, request item K-275.



Left, Supreme Model SA/ROF. Right, Model SA.



Get your message across

Like music on the kilocycles, merchandise on the counter needs a dependable director. On a variety of products, Kaumagraph Identification is the director that helps create better reception, volume acceptance and faster sales tempo. Whether your product is textile, leather, rubber or synthetic, give it a top spot in consumer preference with easily applied, instantly recognized Kaumagraph Identification.

Write for your copy of
"Kaumagraph Reports to Industry"
Please mention
Textile Industries

- *Dry Transfers*
- *Prestomark Labels*
- *Embossed Seals*
- *Transfer Irons*
- *Stamping Inks*
- *Lithography for Box Wraps*
- *Labels*
- *Displays*
- *Booklets and Folders*

Reg. U. S. Pat. Off. "Kaumagraphs" are made only by Kaumagraph

KAUMAGRAPH COMPANY

WILMINGTON 99, DELAWARE

Identification Headquarters since 1902

EMPIRE STATE BLDG., NEW YORK CITY • REPRESENTATIVES IN PRINCIPAL TEXTILE CITIES OF THE WORLD

trade. This unit features cylinders up to 28 cut, and it produces fine fabrics up to 56 stitches per inch. This new model knits 150 denier rayon as well as 30/1 and 60/2 to 40/1 and 80/2 cottons. The size range of this model includes an 18"-56 feed machine producing fabrics up to 75 yards per hour. Micromatic stitch control is provided.

Supreme Knitting Machine Co., 105 Johnson Ave., Brooklyn 6, N. Y.

For additional data, request item K-307, using business reply card on page 205, and specify machine.

Union Special Developments

High speed and easy adjustment are two features claimed for a new top-roller feed lockstitch machine.

Compact and simple in appearance and design, the top roller feed gets its power from the lower rotary shaft by an eccentric connection. Intermittent feeding action is secured through the use of the new curved block clutch. Motion is transmitted to the feed roller through double universal joints and connecting shaft running in a grease-packed tube.

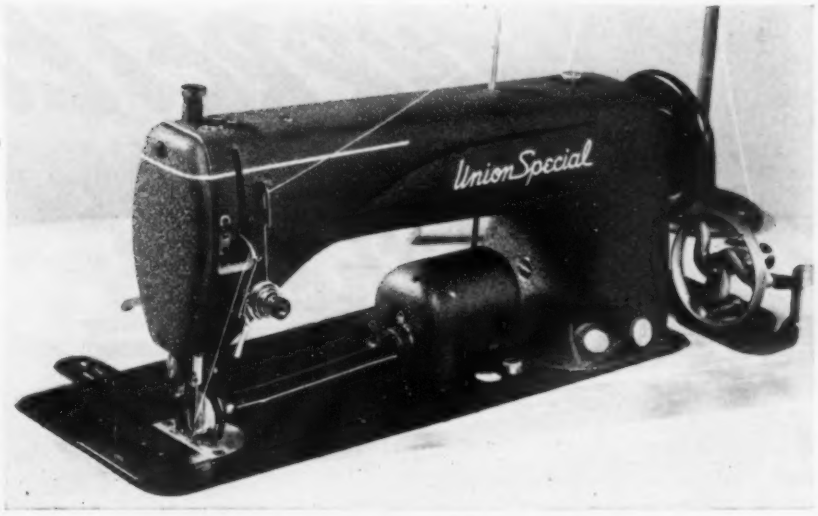
The feeding action is adjustable to run faster, slower, or at same speed as the regular machine feeding mechanism, and inertia and friction are greatly reduced. The new lockstitch machine is being produced in two styles: Style 61300 KA for light to medium work, and Style 61300 LA for medium to medium heavy work.

A new universal needle cooler which is applicable to many types of industrial sewing machines has also been developed.

This unit consists of a small specially designed blower equipped with its own built-in motor and a mounting bracket for attaching the assembly to the sewing machine table board. The air delivery tube is detachable and is offered in several different styles to fit various types of machines.

Union Special Machine Co., 407 N. Franklin St., Chicago 10, Ill.

For additional data, request item K-323, using business reply card on page 205, and specify machine.



Top-roller feed lockstitch machine (Union Special).

Rayon Cake Handling Equipment

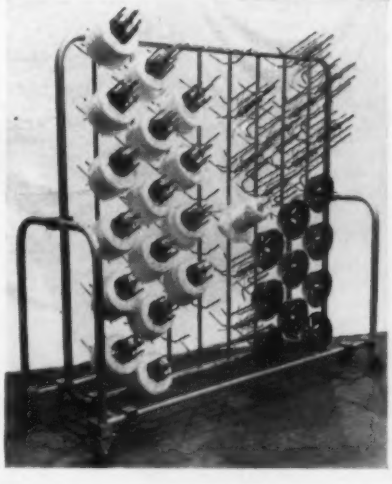
A convenient portable carrier for use in conjunction with "Rayonex" and "Servofil" rayon cake handling equipment was recently announced.

The "Rayonex" is a contractable and self-expanding metal reel for holding rayon cakes while they are being wound off. The cake reel centers the cake automatically without regard to direction of twist or correct positioning. It supports the cake by continuous gentle pressure, and no inserts are necessary.

The special mounting table called "Servofil" may be set up away from the winders. These may be operated by mounting specialists. The portable carriers are used to bring "Rayonex" reels to the mounting table.

The reel is placed on a guide pin in the center of the table, and by pressing a foot-pedal the reel is collapsed to receive the rayon cake. The cover cloth on the cake is then unfolded, and the mounted reel is returned to the carrier which is then taken to the winders. This procedure allows the winder operative to change the reels and mount the "pie-plate" stationary cap which is adjustable to any desired height by a set screw. The pedal mechanism for collapsing the reels can be mounted at individual spindles on winder or cores.

Portable carrier for transporting rayon cake reels (Bruegger).



The Bruegger Winding Co., 318 East Chelten Ave., Philadelphia, Pa.

For additional data, request item K-318, using business reply card on page 205.

Raschel Type Warp Knitter

A new model Raschel type warp knitting machine is on the market. The machine employs latch needles and operates through a precision built "Trick Plate." Speeds up to 200 - 250 courses per minutes can be maintained, depending on pattern and yarn being used. The machine can be used with up to six guide bars, thus allowing for the most intricate constructions. There are 100 inches of usable needle space on the machine, and fabrics can be knit either in the full 100-inch width or in multiple strips across the machine, each with its own selvage.

Two new attachments are incorporated in the new model. One is the "Stechkamm" or sinker bar. This is used where a very tight stitch is desired, or to eliminate selvage difficulties in producing multiple strips. This device has been so engineered that the speed of the machine has not been reduced.

The second attachment is the "Schlagblech" or chopper bar. This device is used for special work where a yarn is laid on top of a

SURPASSES EVERY RIGID LIGHTING REQUIREMENT of the Textile Industry

The Turreter is a Heavy-Duty industrial fluorescent unit, designed to provide higher lighting efficiency at lower cost, with minimum service requirements.

SMITHCRAFT "PLUS" FEATURES . . .

The new Twin-Turret Lampholders, which provide positive protection against lamps falling out, and eliminate costly replacement of broken lamp sockets . . .

Bonderized Electrolytic Zinc-Coated Steel, which is corrosion resistant — particularly important where the humidity is high and conditions extreme . . .

Supercoat high temperature Baked Enamel or Lifetime Porcelain Enamel finish on the Turreter reflector, assures long uninterrupted service . . .

Turreter reflector provides lamp shielding in accordance with the highest accepted standards — and greater light output . . .

Use of the Turreter, whether mounted individually or in continuous row, means installation is simple and inexpensive. Smithcraft Turreters are your assurance of low cost lighting excellence. For full details, address Dept. 150.

Smithcraft
LIGHTING DIVISION
CHELSEA 50, MASSACHUSETTS

In Canada, address inquiries to;
LIGHTING AND LAMPS LTD., 425 RIVER ST., MONTREAL, QUEBEC.

fabric for novelty effects. The old style attachment on old machines would allow maximum speeds up to 60 courses per minute. This new attachment will allow speeds to be maintained at 120 - 140 courses per minute, depending on the yarn and pattern, according to the manufacturer.

Kidde Manufacturing Co., Inc., Bloomfield, N. J.

For additional data, request item K-302, using business reply card on page 205.

Permanent Repair Alloy

A new low temperature bronze base permanent repair alloy is now available. "Lo-Temp," the permanent repair alloy, handles like putty at only 300° and fuses with the metal surface under repair.

The manufacturer states that finished repair can be machined, filed, drilled and tapped, and that the low temperature required will not cause crystallization or distortion.

The John Hewson Company, 70 Wall Street, New York 5, N. Y.

For additional data, request item K-167, using business reply card on page 205.

New Automatic Oilers

A new, visible, unbreakable, automatic oiler is specially designed for places where space between oil hole and machinery is very limited. The feed spout is arranged to the side instead of dead center, making it possible to mount the oiler where clearance is as little as ¾".

Made in one, two and four-ounce capacities, the oiler may be installed quickly by removing old oil cup and screwing in the ⅛" pipe thread adapter furnished.

A gravity-feed oiler has been made for solid bearings where an accurate rate of feed and clean filtered oil are essential. According to the manufacturer, dust or dirt cannot reach the bearing or clog the needle valve as oil is thoroughly filtered through the patented removable filter.

The bottle is made of clear, shatterproof plastic material, removable for easy and safe filling. It is available in 1, 2, 4 and 8-ounce capacities.

Trico Fuse Mfg. Co., 2948 North 5th Street, Milwaukee, Wis.

For additional data, request item K-166, using business reply card on page 205.

Unbreakable automatic oiler (Trico).

Transfer Applying Machine

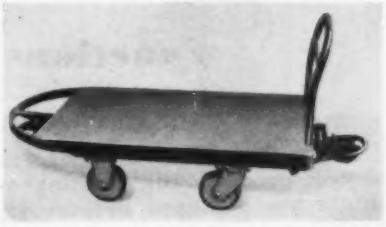
A new transfer applying machine has been introduced to the hosiery industry. The machine automatically lowers and raises the stamping iron, with the result that it is only necessary for the operative to place the goods in position for application of the transfer and remove the goods after they have been stamped.

The stamping iron is clamped onto a frame pivoted at one end and actuated by a cam and spring arrangement. The stamp is pulled down by a spring and raised by cam action. The device is driven by a small electric motor utilizing a variable speed V-belt drive.

McNaughton & Co., Knoxville, Tenn.

For additional data, request item K-303, using business reply card on page 205.

Flat Bed Warehouse Truck



This all steel flat bed warehouse truck was placed on the market recently. Design combines strength, light weight, durability, and maneuverability. Garrick Industries, Inc., 9018 West Olympic Blvd., Beverly Hills, Calif. For additional data, request item K-178.

New Simplex Tricot Machine

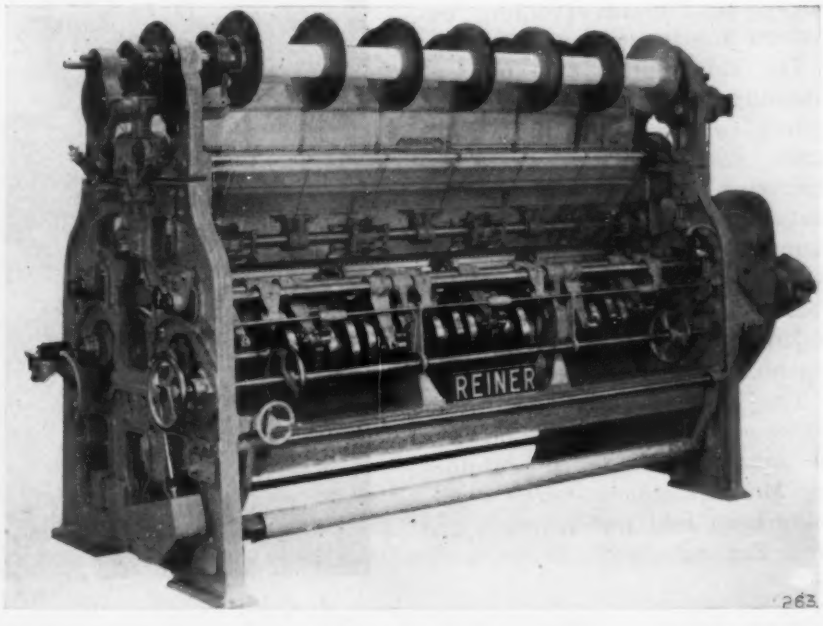
A new Simplex tricot machine has been placed on the market. Technical data on the new machine follow:

Working (knitting) width is 84"; guide bars are supported on Oilite blocks; spools are either sectional or full width; shafts 2¾" or 4½" diameter; hand wheel and shipper rod are on entire length on both sides of machine. The machine comes completely wired. It is equipped with aluminum bars. Sley-points are optional equipment (30-32 gauge). Cast needles or individual needles are also optional.

Robert Reiner, Inc., Weehawken, N. J.

For additional data, request item K-322, using business reply card on page 205.

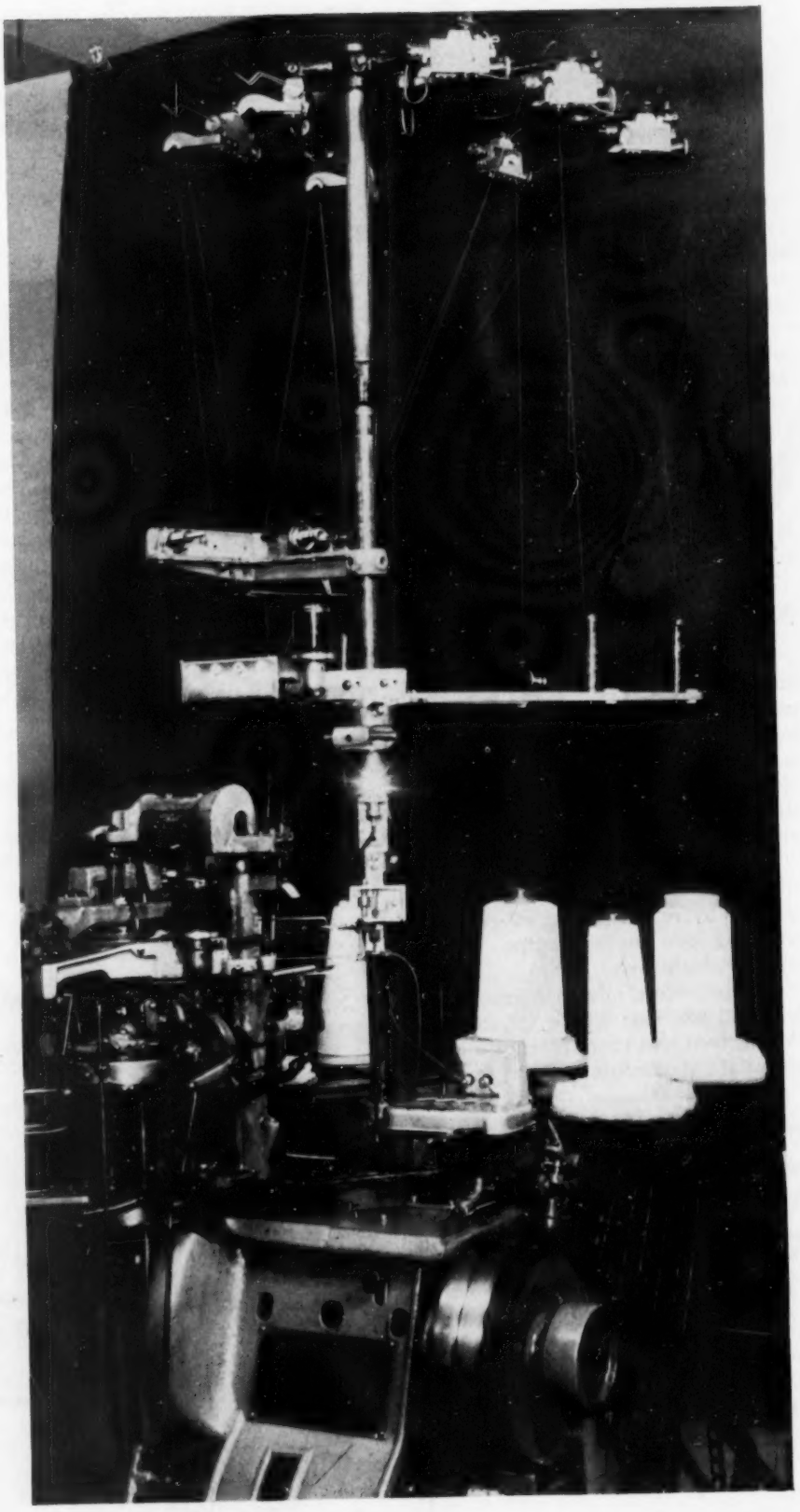
Simplex tricot machine by Reiner.



Stop Motion for Circular Machines

Functions When Yarn Tension is Excessive

Aside from loss in production of knit goods, many knitting machines are damaged because they continue to run after a thread breaks or something goes wrong. A good stop motion mechanism is a valuable asset to have on every knitting machine.



A STOP motion that provides unique protection against damaged machine parts, press-offs, etc., has been developed by C. W. Arrowood of Belmont, N. C.

The mechanism is controlled by the individual threads of yarn, independent of one another. The top part of the machine is grounded, and electrical connections are attached for power to operate the device.

If a strand of yarn breaks, hangs, or runs out, the tension on the stop motion is changed, thus allowing an electrical contact to stop the machine. In addition to stopping the machine, the mechanism rings a bell and switches on a light. The operative is immediately posted by the bell and the light, and he can immediately remedy the trouble, start the machine in operation, thereby avoiding excessive loss in production.

The stop motion operates successfully on 15, 20, and 30 denier nylon, cotton yarns, rayon, and other yarns. It was tested by operating the mechanism for sixty successive stops, and it was found that no defect could be detected on a 15-denier nylon hose.

It is said that the device can be mounted on most circular knitting machines within one hour.

The manufacture and sales rights for the stop motion will be announced in the near future by Mr. Arrowood. Patent rights have been sold for Australia and New Zealand.

KNIT TO FIT...

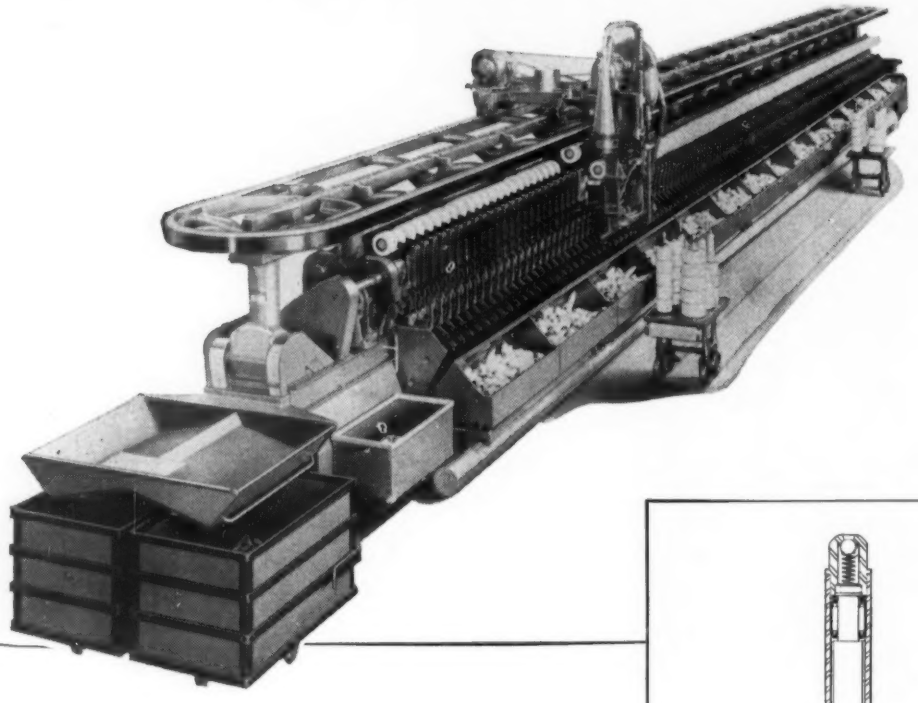
with

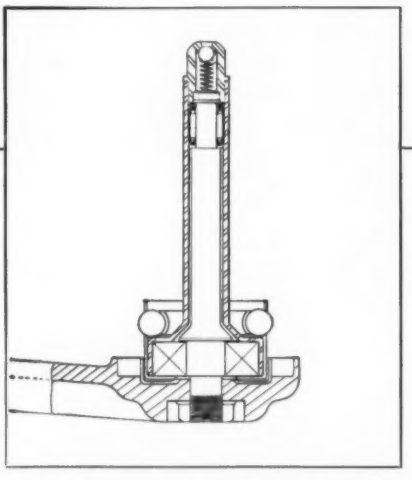
TORRINGTON NEEDLES!

THE TORRINGTON COMPANY
Torrington, Conn., U. S. A. Est. 1866
Branches: New York, Philadelphia, Chicago, Greensboro, N. C., Boston, St. Louis, Toronto, Canada. *Pacific Coast Representative:* E. G. Paules, 1762 West Vernon Ave., Los Angeles 37, Calif. *In England:* Broadgate House, 7-10, Eldon Street, London E.C.2

There's a **TORRINGTON** Needle for every type of Knitting!

Torrington Needle Bearings Reduce Friction and Wear in Barber-Colman Automatic Spoolers





X-section of Spooler cheese arm spindle shows how Barber-Colman secures efficient anti-friction operation in limited space through use of Needle Bearings in Automatic Spoolers.

... these compact anti-friction units prove ideally suited to space, speed and load requirements of textile machines.

The Barber-Colman Automatic Spooler operates at speeds from 900 to 1200 yards per minute. Uniform low tension under these high speed winding conditions is obtained by many mechanical improvements, including the use of Torrington Needle Bearings.

These efficient anti-friction units reduce friction and wear. Long service life and maintenance of precise operation result. The unusually high unit capacity of Torrington Needle Bearings enables them to handle heavy cheeses with an unusually compact, space- and weight-saving design. Efficient retention of lubricant reduces oil leakage and prevents soiling of yarn.

These and other advantages secured in Barber-Colman Spoolers, Warpers and Bobbin Winders can be engineered into your equipment, too, through the use of Torrington Needle Bearings. Call on the specialized experience of Torrington's engineers.

THE TORRINGTON COMPANY
Torrington, Conn. • South Bend 21, Ind.
District Offices and Distributors in Principal Cities

TORRINGTON *NEEDLE* **BEARINGS**

NEEDLE • SPHERICAL ROLLER • STRAIGHT ROLLER • TAPERED ROLLER • BALL • NEEDLE ROLLERS

Southern Hosiery Men Meet in Augusta

Staff Report

MEMBERS of the Southern Hosiery Manufacturers' Association convened for the annual meeting at Augusta, Ga. Activities for the convention began on Wednesday, September 22, and continued through Saturday, September 25. More than 300 hosiery men from the circular and full-fashioned branches of the industry assembled for the convention which marked the fifteenth anniversary of the association.

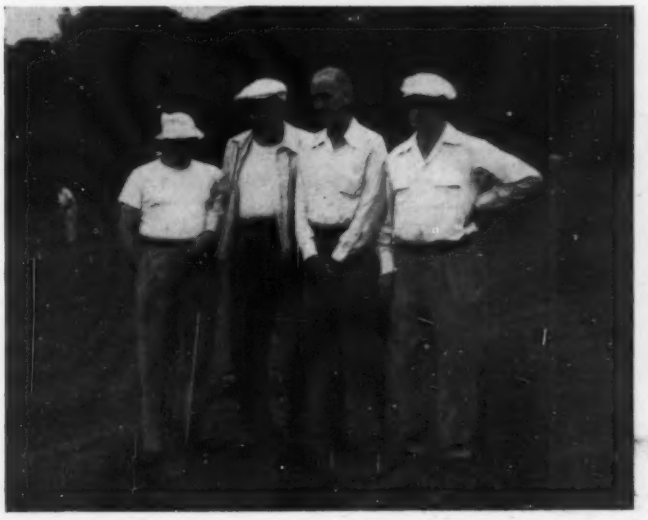
The Board of Directors of the association met for dinner on Thursday night, and officers were elected for the coming year. Those officers that served for the preceding year were reelected for the coming year.

Taylor R. Durham, president of the association, welcomed those attending, and a business meeting got underway Friday morning with an address delivered by Erle Cocke, Jr., general industrial agent, Central of Georgia Railroad, on the "Industrial Progress of the Southeast and the Economic Outlook." Mr. Cocke lauded the Southeast for its great strides forward in industrial growth, and he expressed the opinion that from all indications the economic outlook is encouraging.

The second speaker was Donald Comer, chairman of the board, Avondale Mills, Sylacauga, Ala. Mr. Comer's subject was "Partnership With People" in which he stressed the importance of employ-

Snapshots made before the tee off at the golf tournament on Friday afternoon. From left to right: J. Maguire of John P. Maguire & Co., Inc.; E. S. Jamison of James Jamison Co.; Emory H. Goode, Marshall Field & Co., and Arthur Johnson of Johnson Hosiery Co.

Another foursome consisted of (from left to right): Earl Constantine, president of the National Association of Hosiery Manufacturers; Joe Turbidy, Rubin Ball, and Bob Huffman.



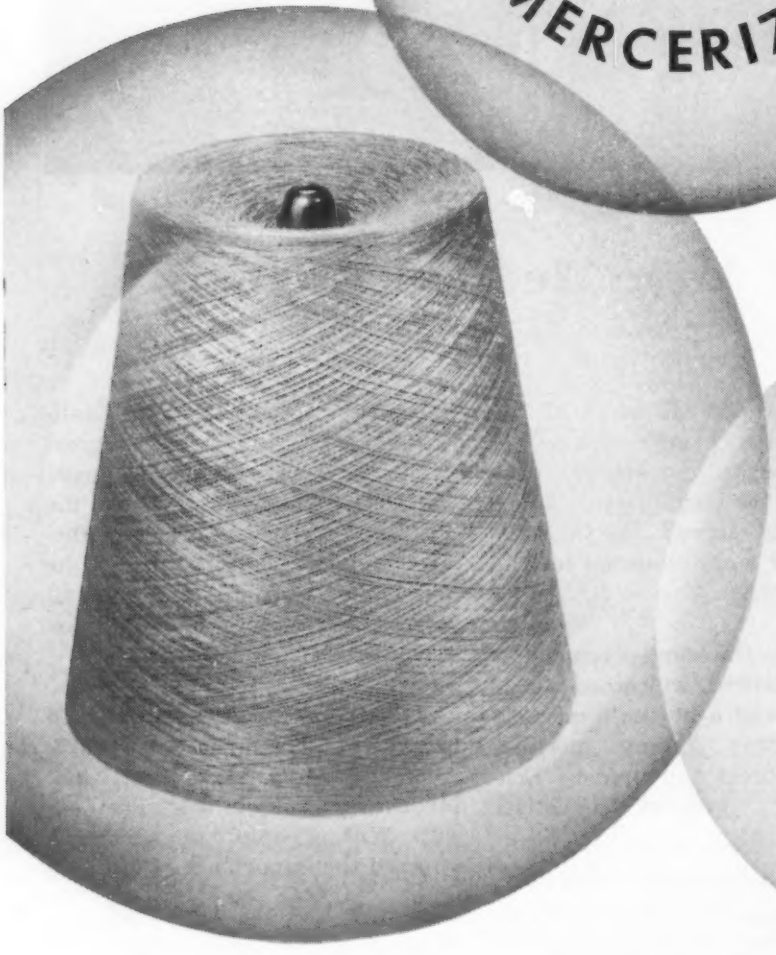
aberfoyle YARNS

MERCERIZED

NATURAL

BLEACHED

DYED



Made of Durene® multi-ply mercerized combed cotton yarn

4 WAYS BETTER than ordinary cotton yarns

EXTRA COMFORT ---more absorbent

EXTRA STRENGTH ---longer wear

EXTRA QUALITY ---lasting lustre

EXTRA SERVICE ---easy to wash

® Reg. U. S. Pat. Off.

NEOPHIL®

Weartwist

Reg. U. S. Pat. Off.

* Neophil, the Nylon Seaming and Looping Thread for Nylon Full-Fashioned Hosiery, made by the Premier Thread Co., Pawtucket, R. I.

ESTABLISHED 1883

aberfoyle

AMERICA'S OLDEST MERCERIZERS

Durene®

® REG. U. S. PAT. OFF.

ABERFOYLE MANUFACTURING COMPANY
123 South Broad Street, Philadelphia 9, Pa.

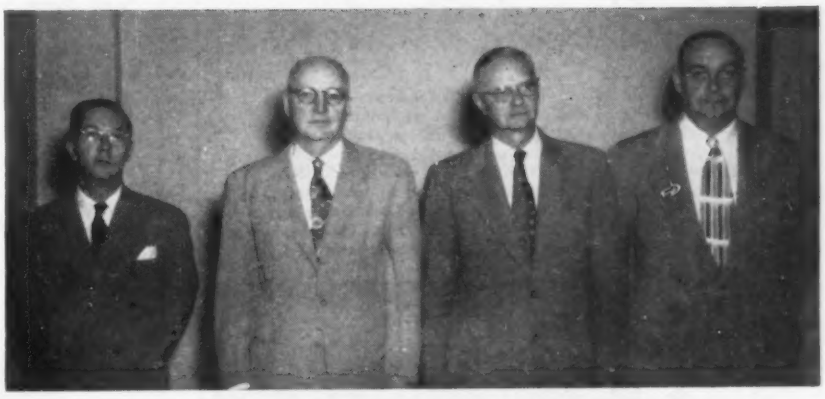
—and in the South
ABERFOYLE MANUFACTURING COMPANY
Belmont, North Carolina

Representatives in principal textile centers of the world

ers and employees working together for agreement and mutual benefits.

A golf tournament was conducted at the Augusta Country Club Friday afternoon. Another group enjoyed skeet shooting which had been arranged for those who did not play golf. Prizes were offered for the best contestants in both sports. The prizes were awarded at the banquet which was enjoyed by several hundred of those attending activities on Friday evening.

A business meeting was held at 10:00 o'clock Saturday morning. Barry Wright, attorney, Rome, Ga., addressed the group on the "First Year of Operation of the Taft-Hartley Law." Ira W. Drake, Industrial Relations Department of Burlington Mills, spoke on the subject "Reducing Training Time and Turnover Through Better Selection of Employees," and Claude Frederick, personnel Director of Hanes Hosiery Mills Company, Winston-Salem, N. C., presented a paper on "Reducing Absenteeism Through the Use of First Aid Facilities and Safety Measures."



Officers of the Association. From left to right, J. F. McCrary, vice-president and chairman, full-fashioned division; T. R. Durham, president; T. F. Dooley, vice-president and chairman, seamless division; and J. L. Turbidy, chairman of the board.

Handy Tool for Changing Carrier Tubes

Enables mechanic to change a tube every 12 seconds

EDITOR TEXTILE INDUSTRIES:

The use of pliers to change carrier tubes on full-fashioned hosiery machines seems old fashioned to me. The major disadvantage of using pliers is that they cause one to be clumsy. They are somewhat awkward to use, and it is not easy to see what you are doing when using pliers to change carrier tubes.

I change carrier tubes on five machines, 24 sections to each machine, or 120 carrier tubes, in 20 to 25 minutes. This is an average of 12.5 seconds for changing each carrier tube.

The tool that I use is manufactured by Ernest A. Feustel, Inc., and is about 1½ inches long (See Fig. 1). The recess in each end of the tool is of a different size to accommodate carriers of different sizes. Fig. 2 shows a mechanic changing a carrier tube with the tool.

CONTRIBUTOR No. 8021

Fig. 1. Sketch of carrier tube remover. Tool will accommodate two different sizes of tubes.

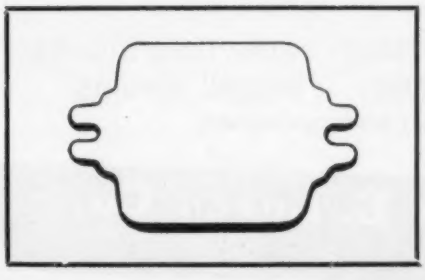
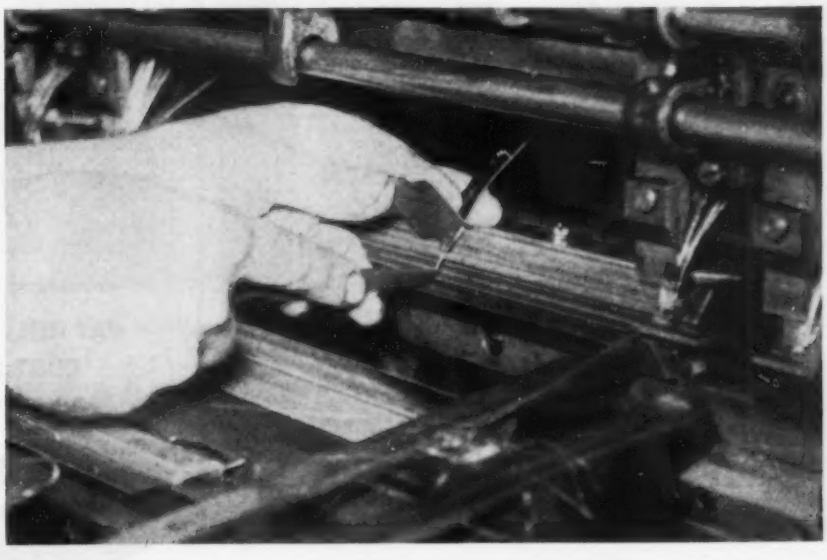


Fig. 2. Changing a carrier tube with the tool.

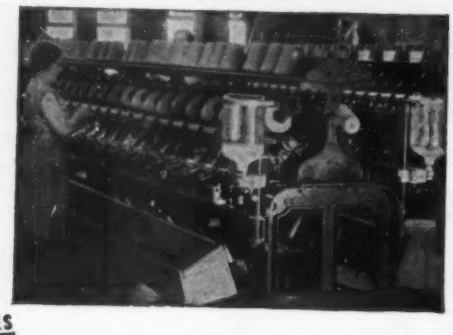


SOFTER, BETTER KNITTING COTTON YARNS—DYED OR BLEACHED—

with Laurel Emulsions

Laurel Emulsions—Hydrocop and 3B Softener—condition and soften cotton yarns, mercerized, dyed or bleached. Used by hundreds of mills for over 25 years to assure proper regain, speed up twist, produce even-running yarns and clearer stitch. Laurel Hydrocop and 3B Softener will not turn rancid or discolor yarn on standing. Easily applied over roller trough or cone winders, quilling frames, or twisters. If you want softer, better knitting yarns to help you meet specifications, send for a trial order of these veteran emulsions, Laurel Hydrocop and 3B Softener today.

★ ★ ★



SOAPS • OILS • FINISHES

Laurel SOAP MANUFACTURING CO • INC •

Wm. H. Bertolet's Sons • *Established 1909*

Tioga, Thompson & Almond Sts., Philadelphia 34, Pa.

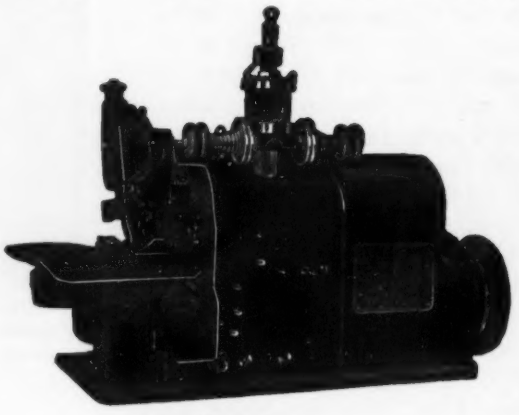
WAREHOUSES: PATERSON, N. J. • CHATTANOOGA, TENN. • CHARLOTTE, N. C.

Established 1838 — THE NEW MERROW — Incorporated 1894

HIGH SPEED OVEREDGING, OVERSEAMING AND HEMMING MACHINES

FOR USE ON

Knitted and Woven Wear of All Kinds



QUALITY RESULTS
HIGH PRODUCTION
CONVENIENT HANDLING
MINIMUM TIME-OUT FOR ADJUSTMENT OR REPAIR
LOW UPKEEP COSTS

For Best Results Use a Machine Suitably Arranged for Your Work

THE MERROW MACHINE COMPANY

2805 LAUREL STREET — HARTFORD 6, CONN., U. S. A.

—*Distributors*—

HOLLISTER-MORELAND CO., P. O. BOX 721, SPARTANBURG, S. C.

American

more economical to use . . .

because it runs more efficiently, producing a finer quality product that can be sold easier and more profitably.

Mr. W. H. Suttenfield—Vice Pres. and Sales Mgr.

MOUNT HOLLY, N. C.
Mr. C. E. Wood
Miss E. R. Abernethy
Mr. T. J. Davis

HIGH POINT, N. C.
Mr. E. J. Holbrook

CHICAGO, ILLINOIS
Mr. E. W. Wood
222 West Adams St.

CHATTANOOGA, TENN.
Mr. W. H. Davenport
735 Chestnut Street

PHILADELPHIA, PA.
Mr. Wm. S. Montgomery
3701 N. Broad St.

NEW YORK, N. Y.
Mr. M. L. Rixon
2806 Empire State B'ldg.

American Yarn and Processing Co.

MOUNT HOLLY NORTH CAROLINA

Knitting and Warp Yarns

4's to 30's

AVONDALE MILLS

SYLACAUGA, ALABAMA

SALES REPRESENTATIVES

COMER-AVONDALE MILLS, INC.

Boston — Chattanooga — Chicago — Charlotte
New York — Philadelphia — Reading

Industrial Engineers

SPECIALIZING IN TEXTILES FOR MORE THAN A QUARTER OF A CENTURY

PAY ROLL CONTROLS — WORK LOAD STUDIES
COST SYSTEMS — SPECIAL REPORTS
COST REDUCTION SURVEYS

RALPH E. LOPER CO.

GREENVILLE, S. C. — FALL RIVER, MASS.

England Tries Out New Nylon Finish Process

Leaders in the hosiery industry in American manufacturing centers recently called attention to an English patent involving a new process for finishing nylons, which is said to have reduced man hours by one-third and cost by about sixty per cent. It is added that patents are pending in the United States. The point is urged that this development abroad can nicely fit in with the general plan being developed in this country to promote better quality and more durability in hosiery.

Stockings normally are preboarded before dyeing and later they are dyed and then refinished to eliminate the creases. The new English method reduces this to a single process, the stockings being dyed and then placed on a machine which does the pre-boarding and finishing at once. It is understood this machine consists of a moving band or belt on which the hosiery forms are mounted. The band travels through a spray box and squeegy rollers into a chamber fitted with infra-red-ray lamps. It continues on through a cooling and conditioning chamber, where high relative humidity is added. Afterward, a point is reached where the operators strip the nylons from the forms.

Majority of Yarns Are in Easy Supply

Worries connected with yarn supply have been relegated to a place near the bottom of the list by most manufacturers of knitwear and many other items. A year ago, export demand for American-spun yarn was active. This condition no longer prevails. A year ago, spinners and yarn suppliers had a basis from which to conjure-up a possibility of scarcity in certain of the wanted kinds of yarn. This is no longer possible.

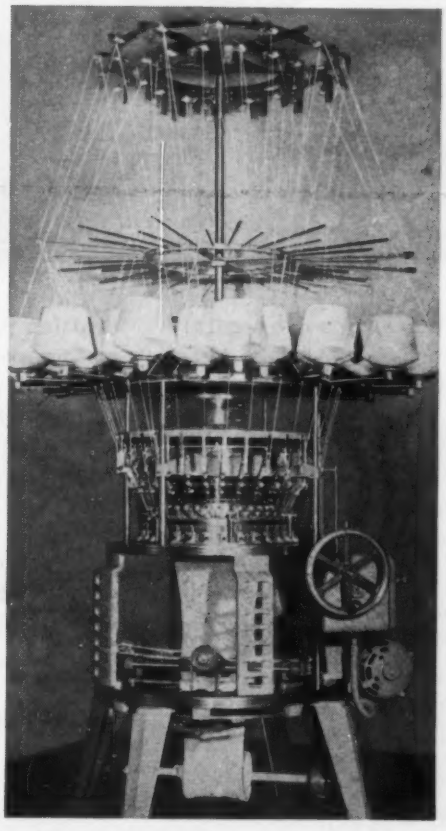
Among market interests, the tendency has been to blame spinners for over-producing during the past summer. Last year spinners were being lauded for not curtailing production, after the dissappointing spring buying season. In each category of knitting yarn, spinners have been trying to arrange their operations to suit the majority of their customers. Yarn sources over the past two years have "plowed back" plenty of profits into new and better equipment, to meet customers' insistence on better quality yarns.

This machinery has been in operation for some months, in many cases, and spinners have the right to expect it to yield returns. However, in the light of later events, some yarn sources presently seem to have turned out more yarn than can readily be disposed of at prices that will yield profits. The production versus profits equation has yet to be solved by the yarn mills.

BETTER SERVICE TO CUSTOMERS

Comes with the Speedier Production

of the EDMOS High Speed TYPE EEM



The high knitting requirements your customers demand call for the finest machines to do your work. Look at the Edmos Type EEM — see it in action at the Edmos plant — and you'll agree it has what you need: UTILITY — for Swiss rib fabrics; also ideal for "T" shirt and polo shirt fabrics. HIGH PRODUCTIVITY: featuring 1½ feeds per diameter inch; produces up to 4 times more work. ECONOMY: Simplicity of parts, easy to operate and maintain. Sizes: 12"-18 feeds to 24"-36 feeds. Available for prompt delivery.

EDMOS PRODUCTS CORP.

13 CHRISTOPHER AVE. BROOKLYN, N. Y.

In a carefully conducted test in a big north central North Carolina mill, *Dayco* Roll Coverings outperformed a similar type roll covering on lapping, unclassed ends down and total ends down. In addition, *Daycos* did not eyebrow. The other roll coverings eyebrowed greatly.

There were 35.4% less ends down with *Dayco* Roll Coverings. This, despite the fact the *Dayco* test frame was located next to a window. The test was run on frames making 24/1 65% cotton and 35% acetate staple.

Dayco Roll Coverings outperform all other roll coverings in test after test because they are built with exactly the right amount of cushion and the correct coefficient of friction to assure perfect drafting properties. Too, *Daycos* are not affected by temperature or humidity conditions. Their superior physical properties remain constant throughout their long life. In fact, the characteristics of *Dayco* Roll Covering are such that *Dayco's* surface drafting properties improve with use.

It will pay you in increased production and better quality products to standardize on *Dayco* Roll Coverings and other textile machinery products. For complete information, write *Textile Products Div., The Dayton Rubber Company, Woodside Building, Greenville, S. C.*

Write today for your free copy of Dayco's new Cot Grinder bulletin, No. A-550.

Dayton Rubber

AN EYE ON THE

KNITTING MILLS

Gulf Coast Hosiery Mills, Inc., recently organized, has taken over a building in Brooksville, Fla., and will establish a mill for the manufacture of nylon hosiery for women. William Singer is head.

Kendall Co., Walpole, Mass., has concluded arrangements for the purchase of Burson Knitting Co., Rockford, Ill., women's nylon and rayon hosiery, and elastic stockings. It will be operated as a part of Bauer & Black division of the Kendall Co., Chicago, Ill. The present line of output will be continued.

Domino Hosiery Mills, Inc., recently chartered with a capital of $100,000, has plans for the operation of a knitting mill in Clemmons, N. C. Ray Snyder, Clemmons, is the principal incorporator and head.

Newton (N. C.) Knitting Mills, Inc., has been incorporated to operate a mill in Newton. Horace Isenhower, Conover, N. C., and Hoyt Roush, Newton, are the principal incorporators and will head the new organization.

Chalfont (Pa.) Hosiery Mills, Inc., women's full-fashioned hosiery, has been acquired by Julius Kayser & Co., Brooklyn, N. Y., and will be operated as a subsidiary interest in the future. Improvements will be made and additional knitting machinery installed for increased capacity.

Norwal Knitting Mills, Inc., North Wales, Pa., women's full-fashioned hosiery, has let general contract for a one-story addition, reported to cost close to $100,000, with equipment.

Orange (Va.) Knitting Mills, Inc., women's full-fashioned hosiery, has plans nearing completion for a one-story addition to cost about $85,000, with equipment.

Clyman Hosiery Co., Minneapolis, Minn., women's hosiery, has plans maturing for a one-story knitting mill to cost an estimated $50,000, with equipment.

Schuylkill Valley Mills, Inc., Spring City, Pa., women's full-fashioned hosiery, has plans maturing on a one-story addition for increased capacity, and will cost over $75,000, with equipment.

Texas Knitting Mills, Inc., Mineral Wells, Tex., has been chartered with a capital of $70,000, to operate a hosiery mill. The incorporators are F. M. Ryburn and Robert B. Hincks, both of Mineral Wells.

Conn Knitting Mills, Inc., an organization headed by Michael G. Conn of Utica, N. Y., has purchased the Lastlong Underwear Mill at Oswego, N. Y., from Ware (Mass.) Knitters, Inc. The new company has been incorporated for $250,000 and has appointed C. C. Valentine & Co., Inc., New York, as sales agents.

SHADES OF VENUS

The ancient Greek "glamour girl" had few of the "adornments" available to her modern counterpart of 1948. Incidentally, we doubt if she was really more beautiful or alluring; certainly, she never had sheer, soft, smoky-dull hosiery to encase those shapely legs (lovely hosiery, made even more lovely by *DuraBeau Finishes*).

DuraBeau Finishes, in addition to beautifying, impart the famous "*film of protection*," which assures *added resistance* to spots, snags and runs,—thus, giving the lady of 1948 "miles more wear" per pair.

DuraBeau
Reg. U. S. A. and Canada
TEXTILE FINISHES

SCHOLLER BROS., INC. Mfrs. of Textile Soaps, Softeners, Oils, Finishes • Collins & Westmoreland Sts., Phila. 34, Pa. • St. Catharines, Ont., Can.

A Knitting Star . . .

STANDARD Durene*

for your dual role of greater production–easier sales

Knitters and customers everywhere applaud the excellent performance of STANDARD Durene.

Smooth, elastic, uniform, this quality mercerized combed cotton yarn flows through knitting machines with the minimum of breaks. It produces more garments of soft, lustrous beauty per hour and so keeps down your production costs. Keeps down your selling costs, too, because garments knit with STANDARD Durene give extra comfort, beauty and wear.

You can count upon STANDARD Durene's outstanding uniformity, its free-running smoothness. Every step of its processing, from selected raw cotton to the finished yarn ready for your machines, is rigidly controlled right in our own plants. It must pass the high quality standards dictated by our more than seventy years' experience, our constant research, as well as the many tests in our modern laboratory. Ask our representative to show you how STANDARD Durene can help get greater production and win easier sales.

*REG. U.S. PAT. OFF.

Standard-Coosa-Thatcher Co.

CHATTANOOGA 1, TENN.

Sales Office: 123 S. Broad St., Philadelphia 9, Pa.

STANDARD DURENE • SELO • MERCERIZED COMBED SAKS • THREADS

Branch Offices:

New York 16, N. Y.
185 Madison Ave.

Chicago 54, Ill.
940 Merchandise Mart

Greensboro, N. C.
Guilford Building

Reading, Pa.
509 Walnut St.

Utica, N. Y.
P. O. Box 105

REPRESENTATIVES IN CENTRAL AND SOUTH AMERICAN COUNTRIES

For Further Information

on Equipment Described in This Issue

In the preceding section, we have presented to our readers brief descriptions of modern equipment, supplies, and materials developed for textile use. The return postal card, when filled in according to the key numbers, will bring you additional information on a product.

K-101—Wool Top Dyeing Machine
K-102—Aluminum Replacement Barrels
K-103—Arkansas Chemicals
K-104—Thickness Measures
K-105—Cot Buffing Machine
K-106—Tinting Compounds
K-107—Portable Hydraulic Pump
K-108—Bench Grinder
K-109—Forced Draft Dryer
K-110—Mechanical Lubricator
K-111—Table Lift
K-112—Waterproof Pulley Lagging
K-113—Carbide and Carbon Chemicals
K-114—Fabric Inspection Machine
K-115—Dixon Equipment
K-117—Extractor
K-118—Aluminum Harness Frames
K-119—Foxboro Instruments
K-120—Treadle Roll Unit
K-121—Fluorescent Fixture
K-122—Unit Heater
K-123—Stroboscope
K-124—Loom Motor
K-125—Textile V-Belt
K-126—Temperature Controller
K-127—Jacobs Loom Supplies
K-128—IBM Machines
K-129—Houghton Chemicals
K-130—Hermas Machines
K-131—Aluminum Loom Beams
K-132—"Load-Grab"
K-133—Solenoid Valves
K-134—Wolf Chemicals
K-135—Hart Chemicals
K-136—Le Blond Equipment
K-137—Aluminum Bobbins
K-138—Lunkenheimer Products
K-139—Midget Psychrometer
K-140—Lubrication Equipment
K-141—Spindle Bracket
K-142—Cloth Handling Equipment
K-143—Scotch Textile Tapes
K-144—Lever Operated Hoist
K-145—Moisture Register
K-146—Label Producing Machine
K-147—Air Line Filter
K-148—Roof Coating
K-149—Precision Tachometer
K-150—Ball Bearing Comb Box
K-151—Onyx Developments
K-152—Portable Vacuum Card Stripper
K-153—Sanitizing Material
K-154—Gas Burning Infra-Red Generators
K-155—Rodney Hunt Machines
K-156—Reliance Motors
K-157—Endless Check Strap
K-158—Warp Lubrication Product
K-160—Belt Conveyors
K-161—Rohm & Haas Chemicals
K-162—Laminated Parallel Plugs and Crank Arms
K-163—Saco-Lowell Developments
K-164—Synthetic Enamel
K-165—Improved Spindle Lubricants
K-166—Automatic Oilers
K-167—Permanent Repair Alloy
K-168—Static Eliminators
K-169—Swiss Machines
K-170—Magnetic Tension Device
K-171—Magnetic Counter
K-172—Variable-Speed Motors
K-173—Desizing Agent
K-174—Rotary-Type Size Pump
K-175—Whitin Equipment
K-176—Axial Air Gap Motor
K-177—Synthetic Detergent
K-178—Warehouse Truck
K-179—Beaded Cord Chain

(Continued on next page)

BUSINESS REPLY CARD
No Postage Necessary if Mailed in U. S.

First Class
Permit No. 582
Sec. 510, P.L.&R.
ATLANTA, GA.

TEXTILE INDUSTRIES

806 Peachtree St., N. E.

Atlanta, Georgia

K-180—Birch Developments
K-181—Quill Polisher
K-182—Dyehouse Supplies
K-183—Ciba Products
K-184—Textile Trucks
K-185—Braider Take-up and Let-off
K-186—Broaching Machine
K-187—Twist Tester
K-188—Water Repellent Finish
K-189—Dronsfield Machines
K-190—Welding Materials
K-191—Alrose Developments
K-192—"Schollerized" Process
K-193—Swiss Harness Frames
K-194—Raw Wool Dyeing Machine
K-195—Gates Loom Accessories
K-196—Chemical Resin Coating
K-197—Telescopic "Jackstacker"
K-198—Anthraquinone Vat Dyes
K-199—Glycols
K-200—Brown Instruments
K-201—Heavy Duty Mill Motor
K-202—Spectrophotometer
K-203—Self-Energized Magnetic Pulley
K-204—Fork Truck
K-205—System for Centrifugal Spinning of Yarns
K-206—"Cloth Room Practices"
K-207—Conditioning Cabinets
K-208—Wool Oil Apparatus
K-209—Fiber Fineness Gauge
K-210—Bobbin Painting Machine
K-211—Wrinkle Resistance Tester
K-212—Kellogg Loom
K-213—French-Type Worsted Spinner
K-214—American-Made Swiss Weaving Machine
K-215—Tenter Chain
K-216—Pneumatic Cut-off Winder
K-217—Combination Unit Heater and Humidifier
K-218—PMA Size for Nylon Warps
K-219—Schiefer Abrasion Tester
K-220—Wool Oil
K-221—Shuttle Improvements
K-222—Doffer Comb Drive
K-223—High Speed Dryer
K-224—Pin Drafter
K-225—Wrinkle Resistant Finish
K-226—Fiber Meter
K-227—Magnepoise
K-228—Vacuum Cleaner
K-229—Open Width Soaper
K-230—All Ball Bearing Drawing
K-231—Crimped Rayon Staple
K-232—Sandwich Blending Unit
K-234—Continuous Crabbing Machine
K-239—Corrosion Resistant Coating
K-240—Ramie Packing
K-241—Akro-Mats
K-242—Cook-P & N Machines
K-243—Wiesner-Rapp Equipment
K-244—Heavy Duty Aluminum Doors
K-246—Portable Swatch File
K-247—Synthetic Detergent
K-248—Air Hose for Small Tools
K-250—Industrial Humidifier
K-251—Speed-Ratio Tachometer
K-253—Double-Double Wheel Yardage Counter
K-254—Double Duty Reel Cap
K-255—Rayon Cake Dyeing Machine
K-256—Worsted Package Dyeing Machine
K-257—Drawtex Harness
K-258—Electric Thin Place Detector
K-259—Temperature Control
K-260—Nylon Heat Treating Machine
K-261—Cotton Bale Trailer
K-262—Cone and Bobbin Trucks
K-263—Spinning Roll Coupling
K-264—Italian-Made Worsted Machinery
K-265—Loom Cloth Rolls
K-266—Embossed Aluminum Roofing
K-267—Cotton Clamp for Fork Trucks
K-268—Grooved Calender Rolls
K-269—Circular Weaving Loom
K-270—Water Cooler
K-271—Steam Trap
K-272—Staple Cutter
K-273—High Speed Warper
K-274—Size Pump
K-275—Stainless Steel Pump
K-276—Dobby Loop
K-277—Tachometer
K-278—Electric Impact Tool
K-279—Printing Counter
K-280—Liquor Pump
K-281—Power Lug Hold-Up
K-282—Decorticating Machine
K-301—Knitting Loom
K-302—Raschel Type Warp Knitter
K-303—Transfer Applying Machine
K-304—Special Purpose Knitters
K-305—Improved Stocking Counter
K-306—Hosiery Finishing Machinery
K-307—Supreme Machines
K-308—Three-Bar Tricot Machine
K-309—"Glosstex" Vinyl Treated Canvas
K-310—Brinton Developments
K-311—Nylon Flyer Blocks
K-313—54-Gauge Machine by Lieberknecht
K-314—Trailer Attachment for Cloth Spreader
K-315—Hosiery Identification System
K-317—Banner Machine for Boys' Socks
K-318—Rayon Cake Handling Equipment
K-320—Formula Reduces Bleaching Time
K-322—Simplex Tricot Machine
K-323—Union Special Developments
K-324—Counter
K-325—Stop Motions
K-326—Take-Up Shaft

(Mail this card for further information)

TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta, Ga.

Please send me, without obligation, further information on the following items described in the MODERN EQUIPMENT AND PROCESSING section of your November 1948 issue.

(Fill in here numbers you select from these pages).....

.....

.....

Name.....

Firm Name..... Position.....

City and State.....

Street.....

Public Relations and Employee Training

Staff Report

ONE HUNDRED and eighty-two members of the Northern North Carolina-Virginia Division of the Southern Textile Association met in the ballroom of the Sheraton Hotel in High Point, N. C., on September 11 to hear Herman Cone discuss "Changes in Public and Employee Attitudes Toward Business." Following Mr. Cone, Dr. C. J. Schollenberger, training director of Dan River Mills, explained the training programs of his organization.

Herman Cone, president of Proximity Manufacturing Company, in Greensboro, and head of the Cone textile interests, spoke, with a certain seemingly unavoidable nostalgia, of the changes in the last sixty years in the attitude of the public and the employee toward the owners and investors in southern mills.

Before the turn of the century, Mr. Cone pointed out, small towns in the South had called meetings of citizens to collect money, build buildings, and beg or cajole anyone with money to establish a mill. Salisbury, N. C., in 1887, had one of their ministers proclaim in public meeting that "next to religion, Salisbury needs a cotton factory." They got one. According to this account, the people of the town wept with thanksgiving for this useful charity, this means by which the poor might be sustained.

Mr. Cone also read a list of company rules used in 1867. Except that the working hours were "twelve each day and until 4:00 p.m. on Saturday," the list differed not too greatly from those of today except in spirit. They left no question as to who was boss.

Mr. Cone did not recommend a return to such rules or the conditions of employment suggested by them. He did, however, feel that more of the public should appreciate those things the mill does for the community. More employees should appreciate the opportunity the mill gives them to earn that which in 1867 would have been reverently called "an honest living."

There are ways, Mr. Cone said, to gain the respect of the public and the employees. Advertising of the right kind helps. The most important thing is action. Employees and public will analyze the company's words in the light of their own conditions.

So far as employee relations are concerned, Mr. Cone's mills try to meet personnel problems through their supervisory employees. Superintendents meet at lunch once each week with th personnel director to discuss industrial relations. Each superintendent has a personnel assistant to aid him in that field of his work. The mill has, also, a formal but practical grievance procedure.

Throughout Mr. Cone's talk there ran the thought that the average mill was a much more harmonious affair sixty years ago, principally because the public and the operatives appreciated what the mill was doing for their well being. With those days gone, Mr. Cone feels that new methods will have to be adopted to bring about a meeting of the minds of management and labor.

Employee Training. Dr. Schollenberger looked at another side. Dan River has an extensive training program for their thousands of employees. As educational director, Dr. Schollenberger has charge of this entire program, and he outlined its broad scope to the meeting.

At Dan River, all supervisory employees are offered courses in labor relations, labor analysis and cost control, public speaking, conference leadership, and industrial management.

The mill also sponsors correspondence courses in formanship. Those taking these courses meet once a week, at which time the secretary of the group mails their homework, and they proceed to study next week's lesson.

The mill has arranged for mechanical courses in vocational schools at night and has set up an extensive apprenticeship training program under the G. I. Bill. Secretarial courses are offered in night school for office employees. Local night schools hold regular lower grade and high school classes, and the Negro schools are also open at night to the employees.

Dr. Schollenberger highly recommended that every mill establish a technical library open to employees and encourage them in every way to subscribe to reputable trade journals, having these periodicals sent to their homes rather than to the mill.

Records should be kept of all educational activities of employees, and these records examined when an opportunity for promotion comes up.

These courses are not expensive to Dan River. The students pay two dollars for each forty hour course, and the Virginia Department of Education and the Federal Government contribute much of the remaining cost.

AHCOVELS for the Soft Touch

NOW MORE THAN EVER

AHCOVELS* have always brought good draping qualities and a smooth, flexible hand to cotton, rayon, wool, silk, acetates, nylon and other fabrics. It's the soft touch.

Now, Arnold Hoffman & Company has improved these matchless softeners so that they are better than ever.

AHCOVELS are now almost pure white in color, more resistant to yellowing, and more stable when subjected to heat.

The best substantive softeners on the market are improved and there is no increase in cost to you. Truly, finishing with AHCOVELS is a soft touch.

Sample and further data on request.

* Trademark Reg.

ARNOLD, HOFFMAN & CO. INCORPORATED

MANUFACTURING CHEMISTS

ESTABLISHED 1815 • PLANTS AT DIGHTON, MASS., CHARLOTTE, N. C., AND CINCINNATI O.

PROVIDENCE, RHODE ISLAND

NEW YORK • BOSTON • PHILADELPHIA • CHARLOTTE • CINCINNATI

WINDING MACHINES — *Principles and Practices*

By JESSE W. STRIBLING
Universal Winding Co.

EXCLUSIVE

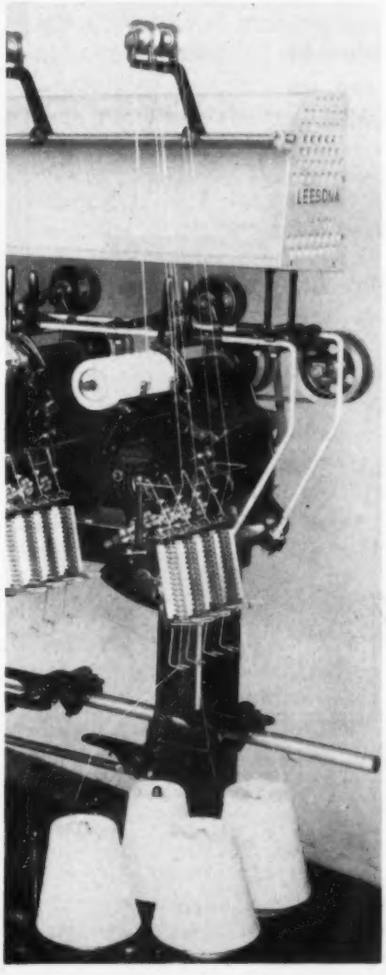
Article 14—Special Package Winding (Cont.)

THIS ARTICLE continues the discussion of special packages which may be wound on the No. 50 machine, dealing with the multiple-end, two-cop attachment as used for braider-cop and Arnold-tube winding; coning covered-rubber yarns from skeins; and bobbin spool winding of sewing thread.

WHERE THE traverse on an individual package is three inches or less and where more than one end is to be wound on each package, as in the case of braider-cop or Arnold-tube winding, it is often advantageous to use the multiple-end attachment in conjunction with the two-cop attachment. Both of these attachments were discussed in Article 13.

The same multiple-end, two-cop attachment is used for either braider-cop or Arnold-tube winding, about the only difference being in the method of holding the cops (paper tubes) on the winding spindle, or copholder. Braider cops are wound on 5/8" tubes, using the standard 5/8" copholder; an expanding mandrel is used on the same copholder to accommodate the larger-diameter Arnold tube.

Fig. 86. Winding two Arnold tubes, two ends on each tube, on the No. 50 machine fitted with multiple-end, two-cop attachment.



Arnold Tube Winding

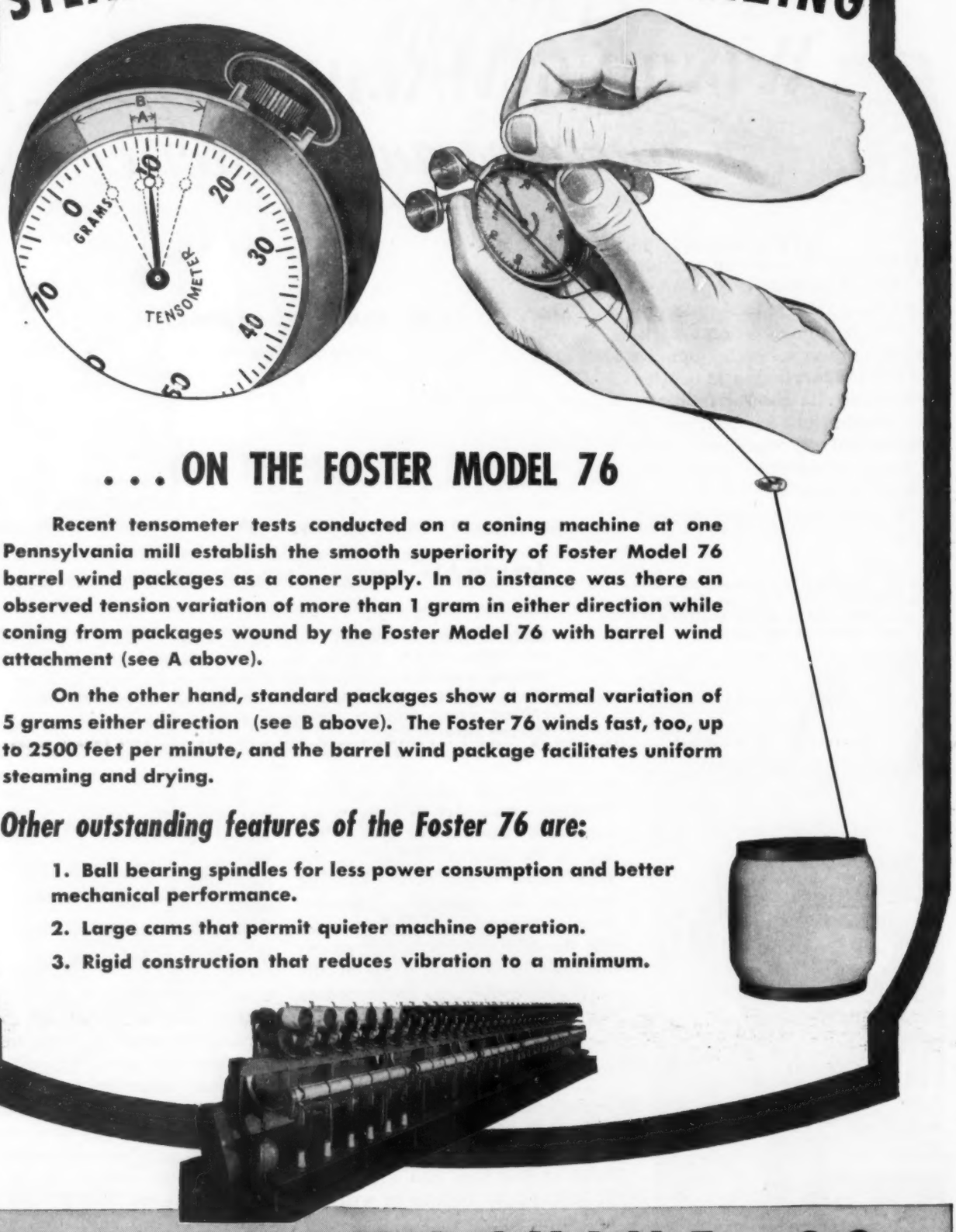
The Arnold tube, as it is generally called, is used as a supply in the machine which makes covered-rubber yarn, as used in the welts of half hose and other types of knitting, as well as in weaving and braiding.

The paper tube has an inside diameter of 1 7/8 inches and is usually 3 1/4 inches long; a 3" cam is generally used. This permits the winding of two tubes on each No. 50 spindle, and each tube may be wound either single end or two ends up.

Figure 86 shows the No. 50 equipped for winding two three-inch-traverse tubes per spindle, with two ends being wound on each tube, from a cone supply. The illustration shows the double thread roll mounted on the supply shelf, this double roll being necessary wherever two-cop, multiple-end winding is done. It is obvious that a thread roll should be used for each package, to prevent the ends going to one package from becoming tangled with those going to the other package. (When winding only one end on each package, the yarn goes directly to the thread guide, and overhead thread rolls are not necessary. In this case, the attachment becomes the regular two-cop attachment, as discussed at the beginning of Article 13.)

Arnold tubes are usually wound to an outside diameter of 3 1/2 inches and at a spindle speed of 1000 rpm, which will give an average yarn take-up speed of about 230

STEADY TENSION – SMOOTH SIZING



. . . ON THE FOSTER MODEL 76

Recent tensometer tests conducted on a coning machine at one Pennsylvania mill establish the smooth superiority of Foster Model 76 barrel wind packages as a coner supply. In no instance was there an observed tension variation of more than 1 gram in either direction while coning from packages wound by the Foster Model 76 with barrel wind attachment (see A above).

On the other hand, standard packages show a normal variation of 5 grams either direction (see B above). The Foster 76 winds fast, too, up to 2500 feet per minute, and the barrel wind package facilitates uniform steaming and drying.

Other outstanding features of the Foster 76 are:

1. **Ball bearing spindles for less power consumption and better mechanical performance.**
2. **Large cams that permit quieter machine operation.**
3. **Rigid construction that reduces vibration to a minimum.**

FOSTER MACHINE CO.

WESTFIELD, MASSACHUSETTS

Southern Office: Johnston Building, Charlotte, N. C.; Canadian Representative: Ross-Whitehead & Co., Ltd., University Tower Building, 660 Ste. Catherine St. W., Montreal, Quebec; European Representative: Muschamp Taylor Ltd., Manchester, England

ypm for each end. When winding one end of 50/1 to each package, or two ends of 100/1 to each package, the production in 40 hours will be about twenty pounds per spindle where two packages are wound per spindle.

The full tubes, each containing about five ounces of yarn, are taken to the rubber covering machine where two tubes, revolving in opposite directions, wind two layers of yarn around one strand of rubber. The covered-rubber thread is taken up in skein form on a swift.

Coning Covered-Rubber Yarns from Skeins

After removing the skeins of covered-rubber yarn from the covering machine, they are then wound on pineapple cones for shipment to the weaver or knitter. The same roller-bail pineapple coning attachment as covered in Article 11 on Nylon Coning, with minor changes, is used for winding this elastic yarn.

Figure 87 is a close-up view of one spindle fitted for this purpose. There are only two changes in the attachment as used for nylon pineapple coning:

1. The inner leg of thread guide (A) has an angular bend which projects over the outer leg, providing a lock to prevent the yarn from rising too high in the guide.

2. A bail (B) is used to guide the yarn from the overhead swift to the thread guide.

As shown in Fig. 88, a lightweight metal swift is used, which is adjusted to fit the skein with just enough tension to prevent the yarn from sagging. The thread passes from the skein over the compensator roll, under the bail (B in Fig. 87) and through the thread guide. The compensator (A in Fig. 88) includes a roller guide, as shown, to eliminate friction at this point. The compensator is connected with the stopping mechanism of the spindle in such a way that, if a tangle occurs in the skein of yarn, the spindle will stop when the compensator is pulled down beyond its normal operating position by the tangle. With this attachment, there is no stop motion to stop the spindle when a skein is exhausted; the operator stops the spindle when she sees that the skein has run out.

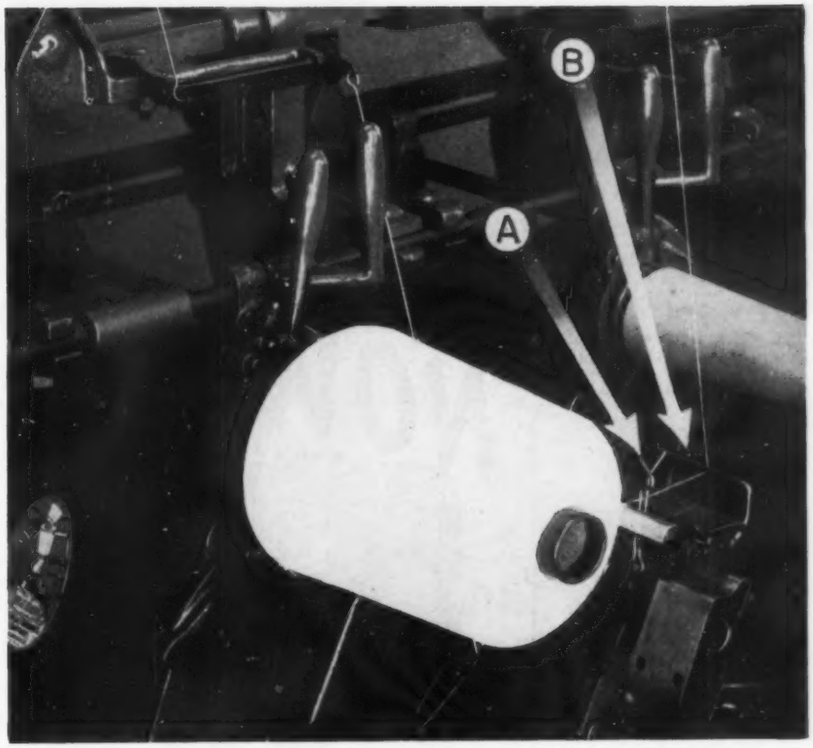


Fig. 87. Pineapple coning attachment for winding covered-rubber elastic yarn from skeins.

Tension is applied to the yarn by a band which bears against one end of the swift hub and acts as a brake. One end of the band is attached to the bracket which holds the swift, and the other end is attached to the leg of the compensator, thus regulating the tension on the yarn. If the tension becomes too high, the compensator will be pulled down and pressure of the band on the hub of the swift will be reduced, thus reducing the tension. Conversely, if the tension is too light, the compensator will rise and increase the tension by tightening the band against the hub.

In winding pineapple cones of covered-elastic yarn from skeins, the No. 50 machine is operated at a spindle speed of 350 to 500 rpm. Two skeins are usually wound onto each cone, each cone holding about 8 ounces of yarn when wound with a 5-inch cam, which produces a traverse of six inches at the start of winding the cone. Such cones are usually wound with 2¼ to 2¾ winds, and the belt gain attachment, with open wind, is preferred, although satisfactory packages can be produced with gear gain. Special wind pulleys for 2¼ or 2¾

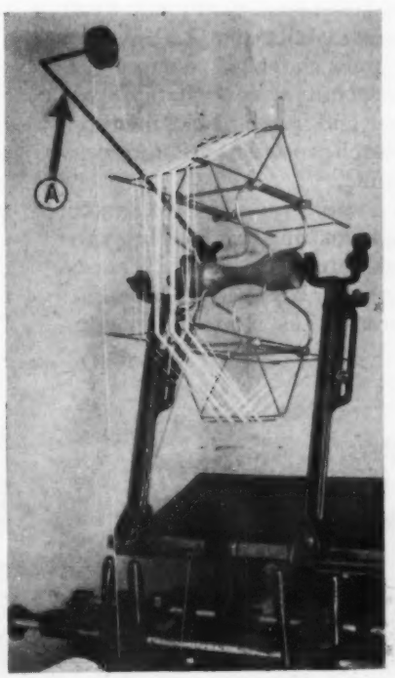


Fig. 88. Showing skein supply of covered-rubber yarn, delivering to pineapple cone shown in Fig. 87.

NEW HIGH-SPEED BLEACHING BOX FEATURES:

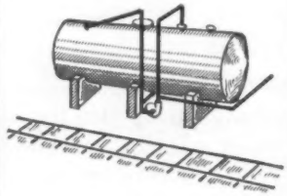
1. Higher bleaching speeds —limited only by washer capacity.

2. Improved piling mechanism—positive pulling draw reels remove cloth faster than previous designs.

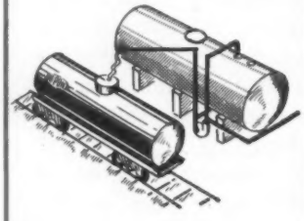
3. Increased capacity—more cloth can be handled without increase in the size of the equipment.

4. Reduction in floor space requirements—overall length of J-Box has been reduced by 25% or more.

FOR GREATEST ECONOMY, CONSIDER:



TANK STORAGE AT THE MILL



TANK CAR DELIVERIES

If you need 5000 lbs. or more of "Albone" 35 (35% Hydrogen Peroxide) per month, you'll find a storage tank installation to be economical.

SEND FOR THIS NEW BOOK!

It shows typical continuous bleach layouts designed to fit the requirements of various plants. For a copy just write: E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Department, Wilmington 98, Del.

THEN...

1939—500,000 yards per week

1945—4,000,000 yards per week

1946—6,000,000 yards per week

1947—20,000,000 yards per week

NOW...

36,000,000 yards per week

BLEACHED IN DU PONT CONTINUOUS PEROXIDE SYSTEMS

That's the latest total production figure from present installations. And, as more and more mills change to this fast, economical bleaching system, the figure will grow larger and larger. Right now continuous bleach construction is underway in more mills.

That's because the Du Pont System is gaining increasing recognition as the right answer to modern bleaching needs. It's continuous. It's speedy. It permits quality production. It's most economical. It's adaptable to mill requirements.

We'd like to tell you more about how the Du Pont Rope and Open-width Systems can fit your bleaching needs. Du Pont bleaching experts will be pleased to work with you, to survey your plant, study your requirements, help you select the proper equipment and assist you in many other ways. E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Department, Wilmington 98, Delaware.

Tune in to Du Pont "Cavalcade of America," Monday nights—NBC coast to coast

DU PONT CONTINUOUS PEROXIDE BLEACHING

DU PONT

REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

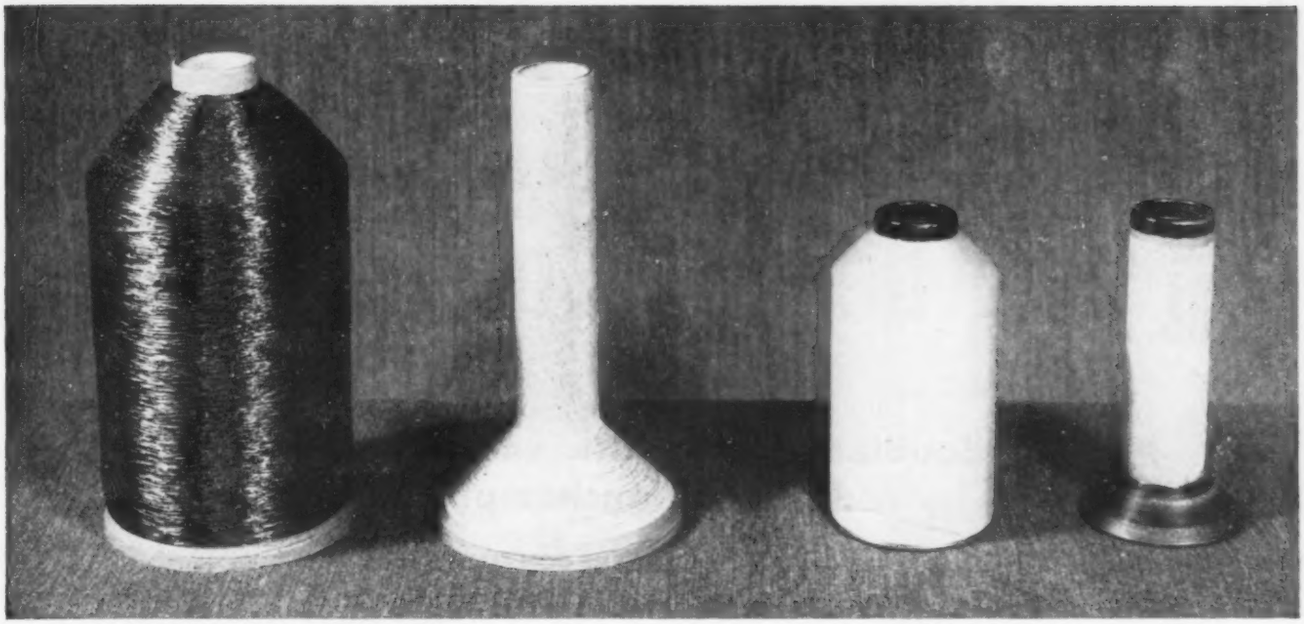


Fig. 89. Full and empty bobbin spools as used for packaging sewing thread on the No. 50 machine.

winds can be furnished; the 2½-wind pulley is a standard part.

Bobbin Spool Winding

Another of the special attachments for the No. 50 is for bobbin spool winding, as widely used by sewing thread manufacturers. The bobbin spool itself is a single headed spool, the base end of which has an angle of 45° with the axis of the barrel. The regular size bobbin spool, shown at the left in Fig. 89, may be wound to an outside diameter of 4 inches, with a traverse up to 5 inches, according to the length of the barrel. The smaller bobbin spool, shown at the right in Fig. 89, is sometimes used where a large supply for the sewing machine, particularly on expensive threads, is not required. Most nylon sewing threads are wound with 3- or 4-inch traverse and to a diameter ranging from 2 to 3¼ inches.

Bobbin spools are preferred by many sewing machine operators because the yarn always delivers with the twist in the correct direction (no one can make the mistake of putting the spool on the sewing machine upside down and thus altering the twist), and delivery of the yarn from the spool is free from interference which might be caused by an overlapping spool flange.

The attachment may be applied to any standard No. 50 machine equipped for single-end winding, and regular (not antiwear) tensions are used, as well as standard diff tension and pressure attachments.

The yarn traverse length is constant throughout the building of the spool, but as the spool diameter increases, the spool itself is moved outward (away from the machine), thus causing the build of the yarn to follow the base of the container and producing a finished package with a tapered outer end.

Details of the attachment are shown in Fig. 90. The bobbin spool

(*Continued on page* 271)

Fig. 90. Showing details of the bobbin spool attachment.

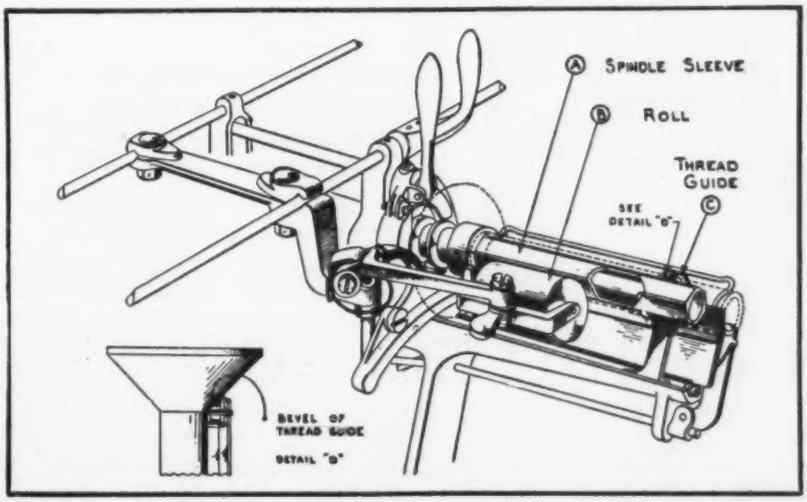
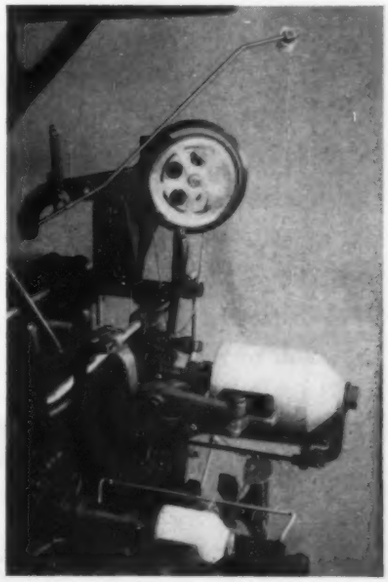


Fig. 91. The bobbin spool attachment, with measuring device, as used in winding sewing thread.



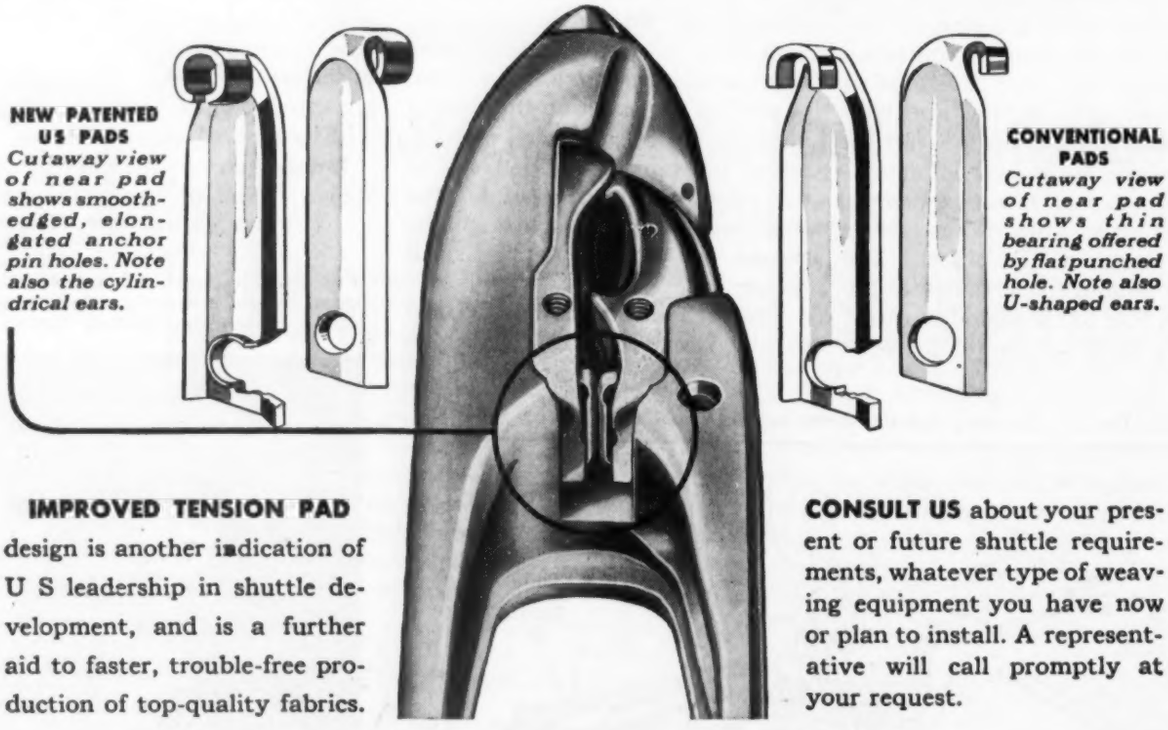
Another US Improvement In Shuttle eye Construction

Pad life doubled — stripback causes minimized — by redesign of anchor pin holes

IN THE NEW patented tension pad designed by U S Shuttle specialists the anchor pin holes are formed so that the metal is drawn out toward the back. The resulting elongated holes provide 100% more bearing surface on the anchor pins. Since the front edge of the hole has a rounded contour, which remains smooth and burr-free even after wear occurs, the causes of stripbacks are minimized. Another improvement is the cylindrical shape of the pad ears, which improves fit in the bushings, decreases bushing wear, and makes changing easier.

IN THE CONVENTIONAL tension pads, anchor pin holes are flat punched. The thin edge alone provides a bearing against the anchor pin, and, as wear progresses, a burr can easily form on the inside of the pad and fray the yarn. Thus, more frequent replacement of pads is required to avoid fabric seconds caused by stripbacks. Also, the U-shaped ears accelerated bushing wear.

COMPARE the new and old pad design in the schematic drawings below, and see why the new U S pads double service life between changes.



NEW PATENTED US PADS
Cutaway view of near pad shows smooth-edged, elongated anchor pin holes. Note also the cylindrical ears.

CONVENTIONAL PADS
Cutaway view of near pad shows thin bearing offered by flat punched hole. Note also U-shaped ears.

IMPROVED TENSION PAD design is another indication of U S leadership in shuttle development, and is a further aid to faster, trouble-free production of top-quality fabrics.

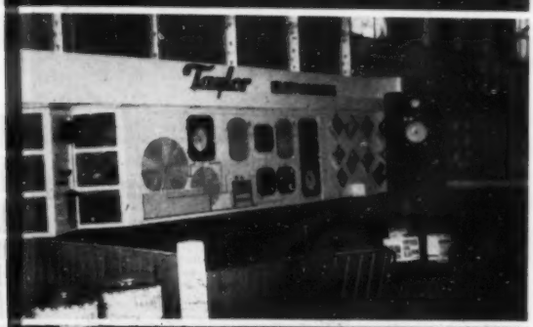
CONSULT US about your present or future shuttle requirements, whatever type of weaving equipment you have now or plan to install. A representative will call promptly at your request.

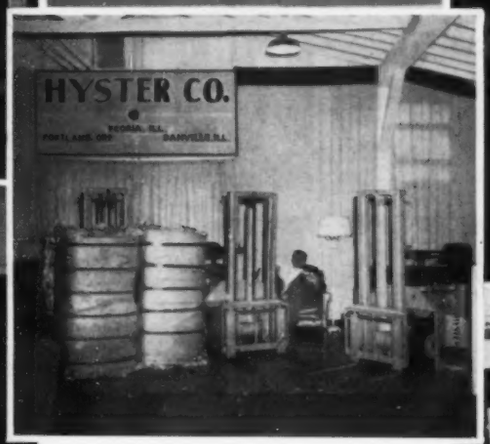
US BOBBIN & SHUTTLE CO.

PROVIDENCE, R. I.
GREENVILLE, S. C.
CHICAGO AGENT:
Albert R. Breen
80 E. Jackson Blvd.

LAWRENCE, MASS.
CANADIAN AGENT:
W. J. Westaway
Montreal Ave., Hamilton, Ont.

JOHNSON CITY, TENN.
CHARLOTTE, N. C.
ALABAMA AGENT:
Young & Vann Supply Co.
Birmingham





Greenville Show Was a Success

VISITING mill men and exhibitors declared the 15th Southern Textile Exposition to be an unqualified success. The exposition, long known as the Greenville Show, was held the week of October 4-9, in Greenville, S. C.

New auxiliaries and supplies were exhibited for the first time at the show, and several booths had production machinery operating. Photos on this page are exposition scenes. Equipment on exhibition was listed in the September issue of TEXTILE INDUSTRIES.

Future issues of this magazine will bring to the reader detailed mill experiences on much of the equipment shown, and this issue carries adequate description of many products seen at the show (see page 91).

Tentative plans have been made for the show to be held again in Greenville sometime during 1950, possibly in the fall. Before the exposition closed, space applications for the next show were signed by many of the exhibitors.

DIAMOND HARD

The Flooring That Has "Taken It" Since 1875

Satisfying customers with industrial flooring of Northern Maple, Beech, and Yellow Birch, has been our business for 73 years. Our contribution to the textile industry's progress has been Quality Flooring, Prompt Service, and the maintenance of a mutually Friendly Relationship.

J. W. WELLS LUMBER CO.

Menominee — Michigan

Phone 3633 Phone 6400

Moving Lease Rods Helps Sticky Warps

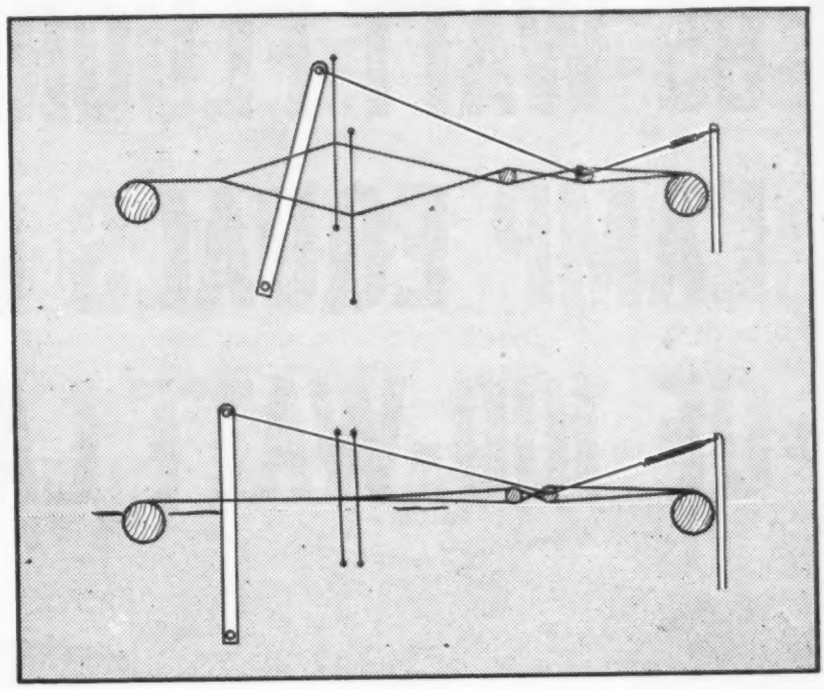
This item was submitted in a "kink" contest.

EDITOR TEXTILE INDUSTRIES:

Occasionally we have trouble with sticky warps, and the ends break behind the lease rods where the ends stick. I find that fastening the back lease rod to the lay sword with rawhide lacing and fastening the same rod to a spring anchored to the loom frame helps to relieve the condition considerably.

The motion of the lay and the action of the spring causes the rod to slide back and forth, thereby breaking up the stickers. After applying this setup to a loom which the weaver could no longer run due to end breakage, the entire warp was run out with no further trouble. The accompanying illustration shows how the arrangement operates.

CONTRIBUTOR NO. 8109



More Comments on Variation in Roving Weights

Contributor No. 7678 discussed the causes of roving yardage on speeders running out uneven on front and back row bobbins. He stated that sometimes there would be as much as two layers of roving more on the front line of bobbins than on the back row. The roving was found to be stretched by the greater distance it had to travel to the front row of bobbins and it was also "choked" by the small holes in the flyers. Contributor No. 7678 solved his problem by enlarging the holes in all of the flyers. Further discussion on the subject is presented here.

EDITOR TEXTILE INDUSTRIES:

In the January (1948) issue of TEXTILE INDUSTRIES (pages 137 and 139) we commented on variation in roving yardage. A discussion of the subject was started by CONTRIBUTOR No. 7678 in the January (1946) issue.

We stated that we were running 10″ x 5″ bobbins on 9″ x 4½″ intermediates converted to slubbers making .85-hank roving from 62-grain sliver. We were testing eight bobbins each day, four bobbins from each of two frames, two from the front row and two from the back row. We conditioned the roving approximately 24 hours in the laboratory at standard atmospheric conditions of 65% relative humidity at 70° F.

We are still using the same procedure in making our roving tests, but we would like to make a further explanation. From each of the eight test bobbins we reel five samples of 24 yards each, making 120 yards from each bobbin. These samples are placed in a conditioning stand, made of one-fourth inch mesh wire, with compartments for each sample or specimen. The roving is sized the next day. Immediately after reeling the test roving we run four of the bobbins on the Belger roving tester.

The four bobbins which are to be run on the Belger tester are weighed on correctly calibrated scales prior to reeling. After the Belger test has been made, the empty bobbins are weighed. This weight is subtracted from the weight of the full bobbin. The result is the net amount of roving on the bobbins. From this description of our method it is obvious that the package weight is at slubber room conditions, but we do not believe that this fact will materially affect

NEW Westinghouse 85-WATT FLUORESCENT LAMP EQUALS OUTPUT OF 100-WATT LAMP

USE OF KRYPTON GAS INCREASES EFFICIENCY 17%; NEW LAMP OPERATES IN PRESENT 100-WATT FIXTURES

This new Westinghouse lamp produces 49.5 lumens per watt, as compared with 42 lumens per watt for the 100-watt lamp which it replaces. The new unit has an average life of 6,500 hours at 12 hours per start.

The 85-watt fluorescent lamp is five feet long, 2⅛ inches in diameter, and offered in five hues of white light—daylight, 4500 degree white, standard white, soft white, and the new warm white. For more information about this new money-saving lamp, call your Westinghouse Lamp Distributor or write to Lamp Division, Westinghouse Electric Corporation, Bloomfield, New Jersey.

YOU CAN BE SURE... IF IT'S Westinghouse
the name you know in LAMPS

our figures to any extent.

In our original discussion we gave the following figures:

125 bobbins, front row, averaged .85976-hank roving.

125 bobbins, back row, averaged .85984-hank roving.

In our first discussion we stated that inasmuch as we had just recently started weighing the amount of roving on the bobbins, we would make a further report at a later date.

We have gone through our test reports, taking two hundred bobbins from the front row and two hundred bobbins from the back row which were sized for hank roving and also weighed for the package test.

The results are as follows

200 bobbins, front row, averaged .86460-hank roving, weight of roving—25.8326 ounces.

200 bobbins, back row, averaged .86640-hank roving, weight of roving—25.8741 ounces.

One must remember that to get the hank-roving we used only 120 yards from the bobbin. To get the package weight we used all of the roving on the bobbin. This fact might account for the roving on the back row having a slightly finer count, yet having a total weight that is a bit higher than the roving on the front row. The differences are so small that we believe for practical purposes they can be ignored. We are yet to be convinced that there are any worthwhile differences in the roving from the front row and the back row of a roving frame other than the normal variations which are to be expected.

Maybe we have approached the problem from the wrong angle and if so, we would like for some reader to clarify the problem.

CONTRIBUTOR No. 7997

Steam Utilized to Stir Size

This item was submitted in a "kink" contest.

EDITOR TEXTILE INDUSTRIES:

Many weavers or slasher room men may be interested in the method we are using to stir the size in the size box on the slasher.

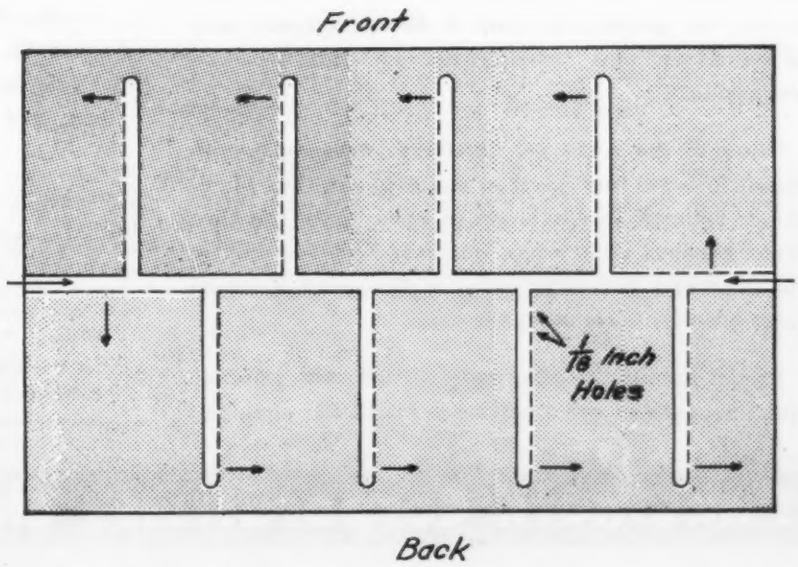
Those who have had experience with sizing yarn are familiar with the problem of applying an even amount of size across the warp. If size is added at one end of the size box, there is a tendency for the new size to remain at that end and push the older size toward the opposite end. The older size is thinner and is broken down more so that the same amount of size of the proper consistency is not applied to both sides of the warp.

The undesirable condition may be alleviated to some extent by adding the new size at both ends of the box. However, in this instance there is a danger of one pipe becoming clogged and remaining undiscovered.

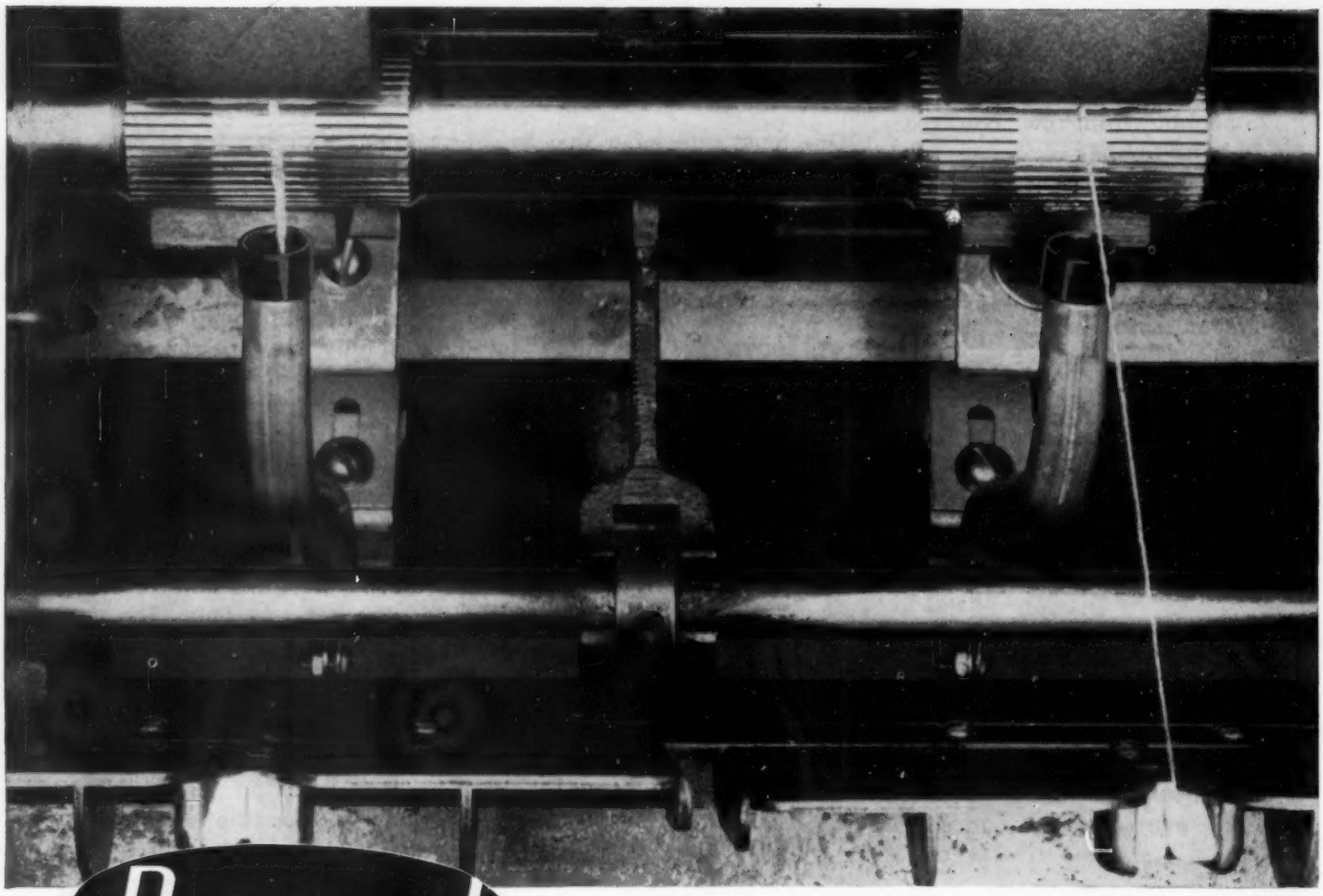
If an open steam coil is used, good results may be obtained with only one pipe supplying size. The accompanying sketch shows how the open coil should be prepared so that the size may be continually agitated. The main steam line may be fed from both sides or from either side alone. The small outlet pipes on the front side of the main line have holes on the left side only. The outlets on the opposite side of the main have holes on the right side only. The steam is emitted from these holes and the size is agitated by a rotary force.

The agitation of the steam tends to keep the size in motion enough to keep it stirred so the new size is mixed with the old. Three or four holes on the front side of the main line on the right side of the box will help keep the size moving around that end, and several holes on the back side of the main line on the left side will help stir the size at that end.

The steam does not flow continuously, but the holes should help eliminate the trouble with improperly mixed size. A small hole used in place of large ones will help maintain the flow of



As indicated in the illustration, steam is expelled in the directions shown by the arrows. The force of the steam impels the size slowly in a circular motion, thus imparting a stirring action to keep the size in motion constantly.



Pneumafil individual suction tube system on widely used wool spinning frame.

PNEUMAFIL ★

. . . Improves Wool and Worsted Spinning

Pneumafil, operating as a vacuum system, removes free lint and foreign matter from the yarn as it leaves the front rolls. When an end breaks, it is picked up and pneumatically conveyed to the collector unit. During this process the yarn is air-opened and may be reused as "new" material without waste machine processing.

Many of the problems heretofore accepted as inherent to wool and worsted spinning are thus eliminated. Spinners are relieved of ends down troubles. There are less ends down and less time required to put up an end. Scavenger rolls are eliminated. Spinning room waste and cleaning are reduced.

Higher spinning speeds frequently are made possible and an operator can tend more Pneumafil equipped frames. Stoppages to straighten out balled-up sides or to remove waste are eliminated, as are wild or flying ends and resultant doublings.

Realize these benefits by equipping your frames with Pneumafil. The overall results will be increased production, improved yarn quality, greater spinning efficiency and lower manufacturing costs.

★ *Registered Trademark*

South America and Continental Europe:
Luwa, S. A., Zurich, Switzerland

Canada:
Ian M. Haldine & Co.
P. O. Box 54, London, Canada

Mexico:
Tecnotex, S. A.
Monterrey 101, Mexico, D. F.

Pneumafil Corporation • Charlotte • Boston

steam for a longer period of time; however, the holes should not be too small to allow adequate heating of the size mix. We have found that one-sixteenth inch holes are large enough to maintain the flow of steam for a longer time and the size is also maintained at an even temperature.

CONTRIBUTOR No. 8094

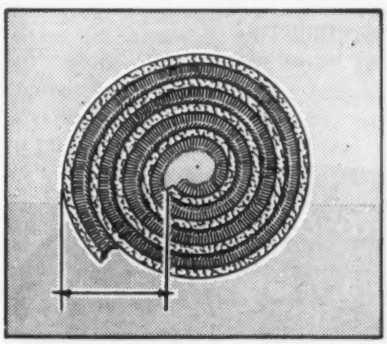
How to Estimate the Length of a Coil of Card Clothing

EDITOR TEXTILE INDUSTRIES:

Usually, it is necessary to know the length of a coil of used card clothing. If the coil is a small one, it is an easy matter to unwind it, measure it with a rule, and then rewind it. However, if the coil is a large one, such a measurement may prove troublesome.

A simple method for estimating the length of a coil of card clothing is as follows:

Count the number of layers in the coil from tail to end, square this number, and multiply by 1/10. The result is the length of wire cloth in feet.



To calculate:

$(N)^2 \times 1/10$ = Length of clothing in feet.

N = Number of layers in a coil.

Example: A coil of card clothing has 25 layers.

Then N = 25

Length of card clothing = $(25)^2 \times 1/10 = 62.5$ feet

Although this gives an approximate figure, it is accurate enough for common mill requirements.

The formula is derived from a simple mathematical calculation:

Let N = Number of layers in the coil.

The width of every layer = 3/8-inch (thickness of card clothing).

D = Diameter of the coil = $2 \times 3/8 \times N$

Area of the coil

$$= \pi (D/2)^2$$

$$= \pi \frac{(D)^2}{4}$$

$$= \pi \frac{(2 \times 3/8 \times N)^2}{4}$$

$$= \frac{9}{64} \pi (N)^2$$

Length of coil

$$= \frac{\text{Area}}{\text{Width}} = \frac{9/64\ (N)^2 \pi}{3/8}$$

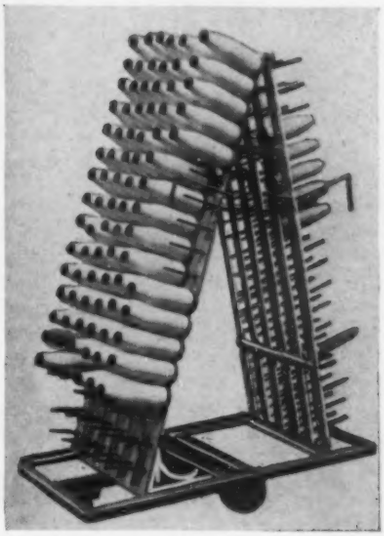
$$= 1.1781\ (N)^2 \text{ inches}$$

or $= 0.0981\ (N)^2$ ft.

$= 0.1\ (N)^2$ ft. (approximately)

The points from which measurements are taken from the coil of card clothing are indicated in the accompanying illustration.

CONTRIBUTOR No. 8114
(China)



Bobbin Truck Aids in Reducing Waste

This type of bobbin truck can be used to advantage in preventing seconds and waste due to soiled, bruised, and tangled bobbins resulting from poor or careless handling methods. It is of especial value in handling fine counts of yarn which are more delicate and easily damaged when stacked or piled in boxes or other containers. The truck shown here was made in the mill shop.

$100 for Best Kink or Short Cut

(Ends November 15, 1948)

ONE HUNDRED dollars will be awarded the contributor who furnishes the most helpful short cut, kink, time-saving device, cost-cutting suggestion, or quality improvement idea by November 15. The contest may be entered by any reader of this magazine, but the kink must not have been published elsewhere.

In sending in ideas, give complete description and where possible accompany description by sketch. Finished drawings are unnecessary. Participants are not restricted as to number of kinks submitted for consideration.

Only one award will be made, but non-winning contributions will be paid for at regular rates if used. Advise in original correspondence if participant's name may be used, or if contributor number is preferred.

All entries must be postmarked not later than midnight of November 15, 1948. Address: Editor "Textile Industries," 806 Peachtree St., N. E., Atlanta, Georgia.

HAVE *You* TRIED "WETTER WATER"?

HERE'S YOUR CHANCE

TRY A FREE SAMPLE OF UNOX FIRE-FIGHTING PENETRANT

Prove to yourself that UNOX Penetrant changes water into the best multi-purpose, fire-extinguishing agent for textile fires. Try this "Wetter Water" on your raw materials that plain water won't penetrate.

Tests and actual fires in baled cotton, cotton roving, and finished textile goods have proved that water treated with UNOX Penetrant goes in and extinguishes fires that plain water just can't get to.

This scientifically-designed "Wetter Water" covers a fire too—spreads quickly over a burning surface—wets everything—leaves no untouched "islands" of fire.

This rapid penetration plus quick coverage means faster extinguishment. Heavy smoke, typical of textile fires, stops immediately when water—made wetter with UNOX Penetrant—reaches the burning material. That saves punishment to mill or warehouse fire-fighters.

Because it penetrates, there's little run-off of "Wetter Water"—in most cases—no water damage to buildings or equipment. And UNOX Penetrant does not injure any textile material.

GET IT—SEND THIS COUPON TODAY!

SUPERINTENDENTS . . .
to cut your fire losses
to improve the fire-fighting efficiency in your mill
to save your men punishment
You need **UNOX** Fire-Fighting Penetrant

CARBIDE and CARBON CHEMICALS CORPORATION
Room 328, 30 East 42nd Street, New York 17, N. Y.

Please send me, without obligation, a sample of UNOX Fire-Fighting Penetrant, and the booklets, "Fighting Fire With Wetter Water", and "How to Cut Cotton Fire Losses".

ORGANIZATION_____

NAME AND TITLE_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

UNOX Trade-Mark PENETRANT

"Unox" is a registered trade-mark of . . .

CARBIDE and CARBON CHEMICALS CORPORATION
Unit of Union Carbide and Carbon Corporation
30 E. 42nd Street UCC New York 17, N. Y.
In Canada: Carbide and Carbon Chemicals, Limited, Toronto

AN

EXECUTIVE VIEWS

THE NEWS IN TEXTILES

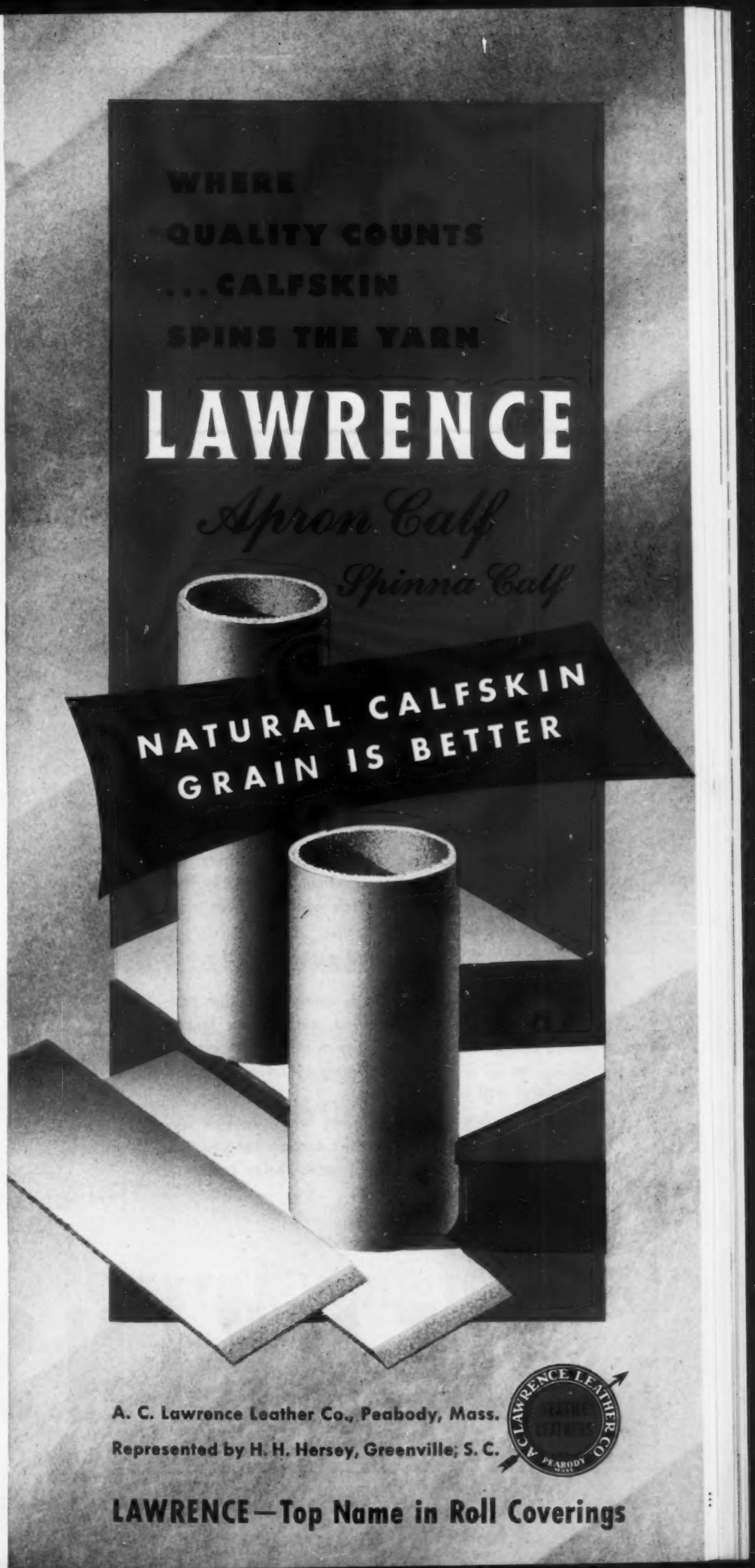
This department is prepared by a man who is closely identified with the textile industry.

EVERY few years a great hue and cry goes up from some part of the country which claims that some other region is "stealing" its industry. Perhaps this is a natural phenomenon because all parts of the country have come to realize the value of industry and each hates to see jobs and pay rolls migrate somewhere else. Within recent months, the sound and fury have been over the "theft" of textile mills from the northeastern part of the United States, with southern towns and cities being designated as the culprits.

Apparently, the point most of these people have missed is that the textile industry is not a great inanimate colossus but is, instead, made up of numerous small units scattered through many states. There are a few large companies in the textile field, but the latest figures show that there are now several thousand individual plants in operation. Each of these was built and continues to operate through invested capital—in other words, "risk" capital.

In the final analysis, this capital is just like the money you or I may have to invest at the end of the month. If we can get 3 per cent at one bank while another establishment pays only 2 per cent, we are not going to worry about what particular street the bank is located on. What we are interested in is the most satisfactory return on our investment.

Not so many years ago, the center of the textile industry was in England, and sailing under the English flag the products of Manchester mills went all over the world; but when it became possible to produce a yard of goods more economically in New England, the center of activity gradually shifted to the new world. A second shift began to take place in the early part of the present century when the southern part of the United States began its industrial expansion. In reality, this was not actually a migration, although some mills were moved



. . . With JENKIN'S *Dynamically Balanced* SPINNING CYLINDERS

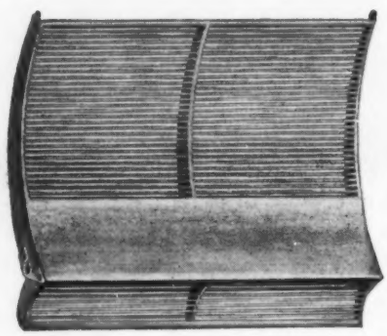
© JENKINS METAL SHOP

Take those vibrating cylinders off your "payroll" . . . replace them with Jenkins Dynamically Balanced cylinders, and watch operating costs go down and yarn quality go up.

PROMPT SERVICE

Our expansion program is completed, our production more than doubled, and we are happy to announce that we can give much better service on all orders for spinning cylinders . . . also picker and card screens.

Don't waste time wondering what Jenkins Dynamically Balanced cylinders can do for you . . . place your order now—or write today for complete information.



JENKINS METAL SHOPS *Incorporated*

GASTONIA, NORTH CAROLINA

physically to the South. It was, instead, more a question of a steady and continuing growth in the southern states while textile plants in New England were gradually dying out.

Where? Occasionally we hear that a textile plant is to be started in Puerto Rico, South America, or somewhere else, and some people wonder today if a third migration may now be underway. They point out that although there is nothing to be alarmed about now, such may not be the case five, ten, or twenty years from now, and that by then it may be too late to stem the tide which may carry the jobs away from the United States and plant them in foreign nations, thus, incidentally, destroying one of the nation's great "defense" industries.

What all of this goes to prove is that industry is never "stolen" by one area from another area. The laws of economics are irrevocable. If a product can be made more cheaply and more efficiently in Labrador than it can in Arkansas, then it is highly probable that some time in the future the odds are that Labrador will have Arkansas' plants. It will not be a question of "stealing" them. It would merely be a natural result which could be expected should manufacturing opportunities in one region become more favorable than in another region.

What Can Be Done? Over the past decade the attitude of government has too often been almost confiscatory as far as industry is concerned. The federal government, the state governments, and local governments have spent a tremendous amount of time investigating industry, admonishing industry, reprimanding industry, and taxing industry, and not enough time trying to *promote* industry. We do not believe it is an exaggeration to say that if the money spent by the federal government from 1932 to 1948 for the purpose of investigating and controlling industry had been spent trying to promote industry, we might be many thousands of jobs ahead of where we are today. It is always a popular sport for politicians to point the finger of blame and scorn at industry, but they are usually the first ones to wail when, because of high costs and unfavorable manufacturing conditions, industry finds it necessary to close its doors.

If the textile industry in the

For 50 years TEXTILE INDUSTRIES has served the textile manufacturing industry faithfully. It is read by more mill men in the United States than any other textile publication.

It heads the list of many advertisers wanting to cultivate their share of this attractive market because T.I. provides maximum coverage at minimum costs.

TEXTILE INDUSTRIES

GRANT BLDG. ATLANTA 3, GA.

It's What Hooker Sulfides Haven't Got that Make Them Important to You

COMPARATIVE freedom from heavy metal salts, the negligible amount of iron,—a maximum limit of 5 ppm in Hooker Sodium Sulfhydrate, and a maximum limit of 8 ppm in Hooker Sodium Sulfide—are reasons why these Hooker Chemicals are so popular among dye chemists.

This high purity, consistently maintained in every shipment, makes them especially desirable for use as reducing agents. These sulfides are employed with excellent results for selective reduction of one of several nitro groups in the same molecule. To eliminate the possible harmful effects of iron, Hooker Sulfides are extensively used in the preparation of aminophenol, many of the anthraquinone dyes, including acid, and nitro compounds such as acid Alizarin Blue SE, Developed Dyes, Rapidogen Dyes and Intermediates.

Another way that Hooker Sulfides are used is for the introduction of sulfur in dye manufacture. They also serve as solvents in the removal of excess sulfur from dyes produced by a sulfur fusion.

Because of their high purity, the need for settling, decanting and filtering is minimized and in many cases eliminated altogether, saving time and inconvenience.

Let Hooker Sulfides improve your products, save valuable time and lower your costs.

SODIUM SULFIDE, Na_2S, a light yellow colored solid in flake form, soluble in water, slightly soluble in alcohol, insoluble in ether.

Analysis

Sodium Sulfide	60 to 62%
Sodium Chloride	1.5% Max.
Sodium Salts	2.0% Max.
Iron	8 ppm Max.
All Other Metal Salts	1 ppm Max.
Water of crystallization	36.5 to 34.5%
Shipping Containers	Drums 90 and 350 lbs. net.

SODIUM SULFHYDRATE, NaSH, a light yellow colored solid in flake form. Soluble in water and alcohol, insoluble in ether.

Analysis

Sodium Sulfhydrate	70 to 72%
Sodium Hydroxide	0%
Sodium Sulfide	0.25 to 2.5%
Sodium Chloride	0.4 to 0.8%
Other Sodium Salts	0.04 to 0.4%
Iron	5 ppm Max.
All Other Metals	1 ppm Max.
Water of Crystallization	28 to 26%
Shipping Containers	Drums 90 and 350 lbs. net.

Hooker's Technical Staff is ready to work with you on the application of Hooker Chemicals to your processes. Technical Data Sheets and samples of Hooker Sulfides will be sent you when requested on your letterhead.

HOOKER CHEMICALS

HOOKER ELECTROCHEMICAL COMPANY

14 Forty-seventh St. Niagara Falls, New York

New York, N. Y. Tacoma, Wash. Wilmington, Calif.

Chlorine
Caustic Soda
Muriatic Acid
Paradichlorbenzene

United States can promote a more favorable attitude on the part of the public and can, at the same time, continue to improve the technological processes by which fibers are converted into yarn and cloth, then we need have little fear that Puerto Rico or any other country will "steal" our mills away from us. We still have the finest inventive genius in the world, the most efficient machines, and the most intelligent and loyal employees. With those advantages, we need not worry about our plants being stolen unless we become smug and self-satisfied and content to rest on our laurels.

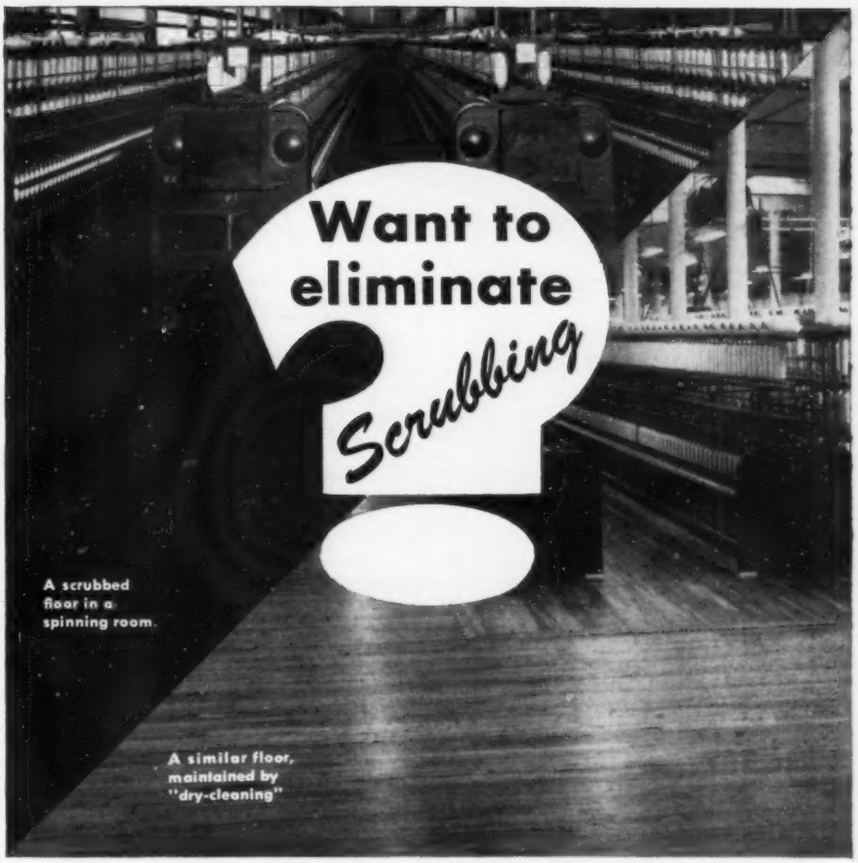
More About Baling Ties

One of the questions which has had the cotton trade agitated for a number of months now appears close to a solution. Some time ago spinning mills reported that painted baling ties were causing them difficulty in that some of this paint adhered to the lint and carried on through the various processes to appear later as small specks in the finished cloth. Since this substance would not bleach out, it resulted in rather sizeable claims against the mill on one or two occasions.

It appears that practically no painted baling ties have been used for the cotton-growing territory east of the Mississippi River, but that west of the River a majority of the bales have been bound with treated ties. Since practically all the ties are made by three or four steel companies, the problem narrowed itself down to (1) leaving the paint off of all bale ties, or (2) changing the type of paint to some substance which would not adhere to the lint.

One complication was in the fact that by the time the damage was actually traced down to the painted ties, hundreds of thousands of bands had been dipped in the asphalt solution which was being used by the steel mills. Huge quantities of these had already left the mills and had been distributed to the cotton trade. However, through the efforts of the National Cotton Council, means were developed for cleaning these ties, and these cleaning processes were widely publicized to gins and compresses.

As an additional effort to correct the problem, the Cotton Committee of the American Cotton Manufacturers Association issued an illustrated booklet which portrayed in easy-to-understand form the damage which frequently results from



...and get cleaner floors for less!

FAST, EASY-TO-USE Tennant Floor Machine whisks grime from floors and picks it up in 1 operation. Various models for 8", 12" or 16" drum-type accessories for complete reconditioning and maintenance of mill floors. Has semi self-propelling action.

What a difference when you stop scrubbing and use *modern* methods! Same traffic, oil and dirt conditions—but the "dry cleaned" floor is brighter . . . less slippery . . . easier to clean, and it *costs less to maintain.*

TENNANT FLOOR MAINTENANCE SYSTEM

1. Restores life to your floors. Gets rid of dark, rough, water-softened fibers . . . assures a clean, smooth, new-wood surface. Brings back original beauty of floor.

2. Hardens surface to resist wear. Special sealing process makes floor resistant to dirt penetration and traffic wear. Makes floor lustrous, easy to keep clean.

3. Dry Cleans to keep floor bright. A fast easy job with a Tennant machine; cleans floor like magic! Saves manhours, keeps floor smooth, safe, attractive.

G. H. TENNANT CO.
2585 North Second Street
Minneapolis 11, Minnesota

Write Today!
Send for NEW 4-page illustrated bulletin on "How to Get Better Results in Textile Floor Maintenance."

The way to finer floors
TENNANT
Floor Maintenance System
Established 1870

FLOORS, LIKE ROADS ...ARE SAFER *when dry*

U.S. ACME
MODERN THROWING EQUIPMENT

PRODUCING PROFITS
in throwing mills throughout the world!

JUMBO DOUBLE DECK TWISTER

ECONOMICAL, HIGH-SPEED, ACCURATE TWISTING TO THE FINEST OF DENIERS!

EFFICIENTLY HANDLES 8-oz. to 16-oz. YARN PACKAGES (TAKE-UP SPOOL OR HEADLESS PACKAGE—OR BOTH!)

(automatic stop motion with headless package assembly)

MARQUETTE ROLLER BEARING SPINDLES AVAILABLE WITH MACHINES

A Versatile Production Unit . . . Simplified In Design, Unique In Construction—The Finest In Mechanical Perfection!

From its unique traverse cam unit with a built-in ball type secondary motion (to prevent built-up ends of yarn on spools) to its newly improved twist unit (only one gear to change for each given twist), the U. S. ACME Jumbo Double Deck Twister is designed and engineered for trouble-free twisting . . . creating top production records throughout the world, delivering finished yarn of unsurpassed quality at rock bottom operating and maintenance costs.

WRITE FOR ILLUSTRATED BULLETIN

U.S. TEXTILE MACHINE CO.

700 Gilligan St.—Scranton 8, Pa., U.S.A.

painted ties. This booklet was widely distributed throughout the trade and has done a great deal to educate all of us with regard to this problem.

Reports now indicate that some gins and compresses are removing the paint from the ties they have on hand and are specifying unpainted ties for future orders. Although some rust damage may result if ties are left unpainted, it is felt that this damage would not be nearly so great as that resulting from asphalt-stained cotton.

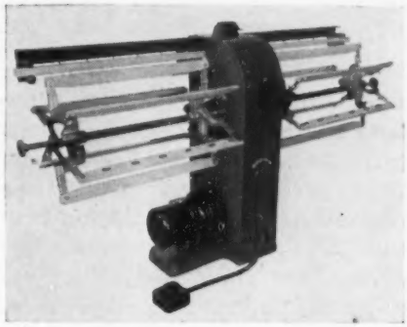
Adding impetus to the campaign has been a decision of the Southeastern Appeal Board—an arbitration board set up by the American Cotton Manufacturers Association and the American Cotton Shippers Association—which, in effect, gave the mill the right to charge the cotton merchant with the cost of cleaning cotton which has been stained by painted ties.

The Problem Now. As we understand it, the problem now facing the cotton trade is whether some substitute paint should be developed which will not stain the lint, or whether it would be more satisfactory to leave all ties unpainted. It has been pointed out that the development of another paint would probably increase the cost of the ties and thereby increase the cost of the cotton, because in the past the steel companies have simply dipped a large number of bands into a vat in one operation, but if some other type paint is used, it is believed that this method would not be practical. If this is correct, then it might be necessary to scrap the equipment now on hand for doing this job, and it would then be necessary to develop equipment for some new process.

It is also pointed out that if, on the other hand, no ties are painted, then mills may experience considerably more rust damage than has been the case in the past. It appears that large quantities of the current crop will be stored under government loan and, thus, the possibility of rust damage will be increased if these bales are stored for any considerable length of time.

In spite of these obstacles, it appears, however, that a solution will be found to the problem. If it has proved nothing else, the bale tie situation has proved the fact that when it becomes necessary to do so, all phases of the cotton industry can work together to solve a particular question.

The *double end* Fidelity Skein Reeler is shown. Fidelity also makes *single end* Reelers. Complete information will gladly be furnished on request.



your profit

The efficiency and ease of operation of the Fidelity Skein Reeler will guarantee savings in labor sufficient to pay for installation in a short time on any type of yarn. It is the profitable way to reel skeins.

FIDELITY MACHINE COMPANY, INC.

Manufacturers of intricate precision machinery Since 1911

3908 FRANKFORD AVE.
PHILADELPHIA 24, PENNSYLVANIA

ALERT mill men keep their subscriptions renewed promptly, to avoid any chance of missing the timely and helpful material carried month after month in their favorite textile publication.

TEXTILE INDUSTRIES

806 Peachtree St., N. E.

Atlanta, Georgia

FUTURE EVENTS

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6			
10	11	12				

Nov. 6—South Carolina Division, Southern Textile Association, Clemson College School of Textiles, Clemson, S. C.

Nov. 11—Annual meeting of Cotton-Textile Institute, Plaza Hotel, New York, N. Y.

Nov. 17—Annual meeting of Carded Yarn Association, Hotel Charlotte, Charlotte, N. C.

Nov. 18-19—Annual meeting of Textile Research Institute, Inc., Waldorf-Astoria Hotel, New York, N. Y.

Nov. 19—Meeting of New York Section, AATCC, Kohler's Swiss Chalet, Rochelle Park, N. J.

Dec. 4—Meeting of Southeastern Section, AATCC, Atlanta, Georgia.

1949

Jan. 10-14—3rd National Materials Handling Show, Convention Hall, Philadelphia, Pa.

March 7-9—Annual meeting of National Cotton Council, Los Angeles, Calif.

March 21-25—Textile Wet Processing Equipment and Supplies Exposition, 71st Regiment Armory, New York, N. Y.

March 31-April 2—Annual convention, American Cotton Manufacturers Association, Palm Beach-Biltmore Hotel, Palm Beach, Fla.

April 25-29—Knitting Arts Exhibition, Atlantic City, N. J.

May 2-7—International Textile Industries Exposition, New York, N. Y.

May 9-13—4th annual National Textile Seminar, Shawnee Inn, Shawnee-on-the-Delaware, Pa.

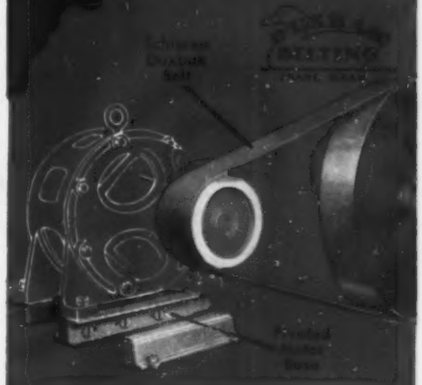
1950

May 8-12—American Textile Machinery Exhibition, sponsored by National Association of Textile Machinery Manufacturers, Atlantic City Auditorium, Atlantic City, N. J.

Hope for Stabilization Through Credit Rules

One financial interest, who has a paramount stake in the welfare of textile manufacturers and distributors, takes a favorable view of the probable results of the recently effected credit legislation adopted at last session of congress. In part, this authority says, "The controls will help somewhat to hold down the demand for consumers' goods. Consumers will have to rely more on current income, which is exactly what they should do. Wage and salary earners should not incur debts at a high price level, which may have to be paid off when prices and incomes are much lower than now. It is better for our national economy for the public to save when incomes are high and draw on the savings when incomes are lower."

Have you looked into this New, Low-Maintenance Drive?



This new drive saves you maintenance dollars because *it protects itself* against belt and bearing abuse. Furthermore, it has the capacity, at all times, to transmit the total output of the motor.

Here's how it works.

THE PIVOTED BASE GIVES YOU AUTOMATIC TENSION CONTROL

With the pivoted motor base you can predetermine how much belt tension you'll need to handle peak loads. You set the base; letting a part of the motor weight lean into the belt to give you the proper tension. From then on, the drive automatically maintains that tension despite all variations in load. This eliminates guesswork and keeps belt and bearing wear to a minimum.

THE SCHIEREN DUXBAK BELT PROVIDES SHOCK ABSORBING ABILITY, FULL-FRICTION PULLEY GRIP, LONG LIFE

The Schieren Duxbak belt does its part in this new, low-maintenance drive team by soaking up shock. This high quality belt has a slow, self-adjusting resiliency that protects bearings by cushioning sudden loads.

This belt's live, dynamic grip and pull transmits more power, with less maintenance.

Write for details on this modern short center drive.

SC-32

CHAS. A. SCHIEREN COMPANY
36 FERRY STREET, NEW YORK 7, N. Y.
Tanners and Manufacturers Since 1868
80 Years in Business
Branch Offices in Chicago, Dallas, Denver, Detroit, Newark, New York, Philadelphia, Pittsburgh, Salt Lake City & Toronto, Can.

ACCURATE
Textile Inspection
with
FLASH-O-LENS
THE ILLUMINATED MAGNIFIER
SPOTLIGHTS AS IT MAGNIFIES

EXCELLENT FOR

- counting picks
- laying out textile patterns
- matching colors
- testing stitch length and width on knitted fabrics
- all types of textile inspection

Portable Battery and Electric Models Available with 5, 7, 20, or 40 Power Lenses.

Detachable Textile Counting Plate for use with 5 power models quickly gives 1", ½", ¼", and ⅛" measurements.

8 Power Battery Model with textile plate **$10.35**

5 Power Electric Model with textile plate **$13.65**

Send for our illustrated catalog. Use coupon below.

E. W. PIKE & CO. ELIZABETH 3 NEW JERSEY

Please send me a free copy of your catalog on Flash-O-Lens Illuminated Magnifiers for Textile Inspection.

Name _____ Title _____

Address _____

City _____ State _____

NEWS in BRIEF

No Cotton Marketing Quotas on '49 Crop. Secretary of Agriculture Charles F. Brannan has announced that no cotton marketing quotas will be proclaimed for the 1949-50 marketing year (1949 crop) because the total supply, as defined by legislation, of American cotton is less than the amount which would make quotas mandatory. The secretary advised that many cotton farmers would have been faced with immediate and drastic adjustments, and the Department would have met serious administrative difficulties if it had been necessary to proclaim quotas for next year.

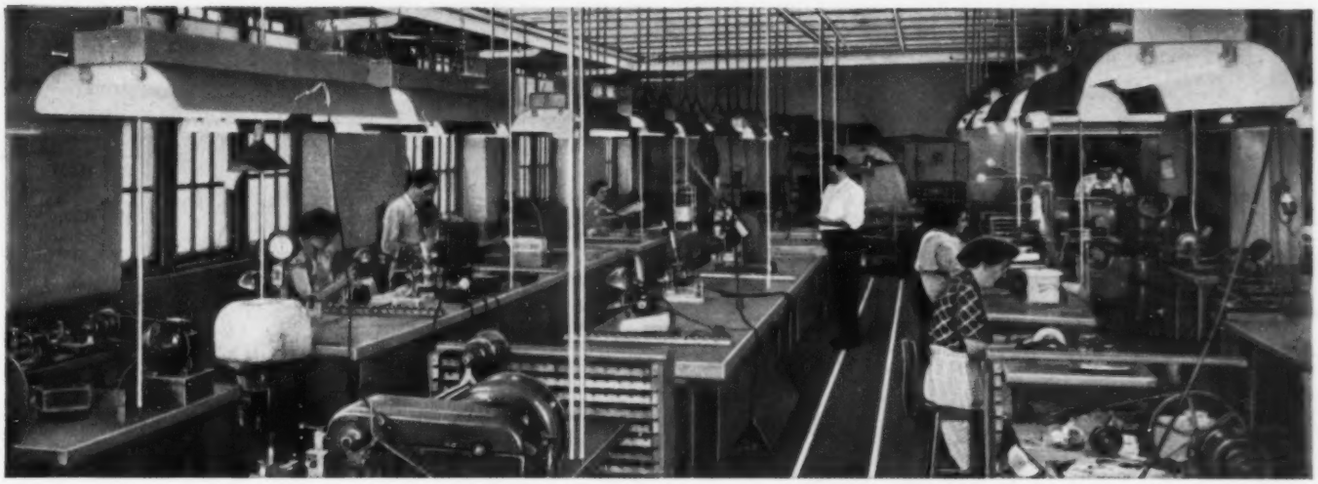
Action Requested on International Textile Standards. Upon returning to this country and reporting on the meeting of Committee 38 on Textiles of the International Organization for Standardization at Buxton, England in June, D. E. Douty, chairman of the American delegation, urged prompt action on questions concerning international unification of textile standards. Mr. Douty said that the action was necessary in order to prevent delays in a field which is notably important to both importers and exporters, and to textile manufacturers.

The meeting in England was said to have shown that European practices in tensile testing differ widely from those in the U. S. Agreement was reached on a number of recommendations to be submitted to the national standardizing organizations in the various countries for acceptance.

German Cotton Goods Reach

Breaking ground for the new Philadelphia Textile Institute at School House Lane and Henry Avenue, Germantown, Philadelphia, Pa.—September 15th, 1948. Left to Right: Richard S. Cox, Dean, Philadelphia Textile Institute (holds glass filled with dirt); Alban Eavenson, Eavenson & Levering Co.; Hon. Barnard Samuel, Mayor of Philadelphia; Bertrand W. Hayward, Director, Philadelphia Textile Institute; Theodore B. Hayward, Chairman, Building Committee, Philadelphia Textile Institute Foundation; F. Everett Nutter, Vice-president, Goodall-Sanford, Inc., and Chairman of the Board of Governors of the Philadelphia Textile Institute; Colonel Millard D. Brown, President, Continental Mills, Inc., and President of The Philadelphia Textile Institute Foundation (with shovel).

C. E. Phillimore, Vice-President of Bell & Howell Co., reports on the result of Color Conditioning their Chicago, Ill. plant: "From an aesthetic as well as productive viewpoint . . . it has proved of value. Worker morale and efficiency . . . have materially increased. Machine operating parts painted in contrasting colors have been a factor in bettering safety records, too."



DU PONT COLOR CONDITIONING

MEANS GREATER OUTPUT...MORE PROFITS

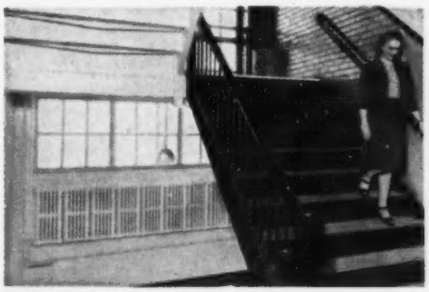
Du Pont Color Conditioning adds impetus to production by improving your employees' output. The correct use of color throughout your plant contributes to workers' efficiency, safety, comfort, and morale. Rate and quality of production go up . . . maintenance costs are lowered . . . your profit picture looks dollars better.

The advantages of Color Conditioning are being proved today in hundreds of industrial installations. To find out how this scientific painting plan can benefit every area of *your* plant, mail coupon below.

VISIBILITY. Color Conditioning provides the correct degree of "brightness" within the worker's field of vision . . . lets workers see what they are doing . . . eliminates eyestrain . . . minimizes fatigue.

SAFETY. The Du Pont Safety Color Code points out accident hazards, identifies safety and fire protection equipment . . . keeps workers alert through the uniform use of color.

MORALE. Restful, harmonizing colors can do a lot toward making employees more content in their environment, help better employee-management relations.



DURABILITY. Color Conditioning finishes represent the highest quality in maintenance paints. Based on years of Du Pont research, rigidly pre-tested, they assure you the utmost in application economy and long-term durability . . . stretch out the interval between plant repainting.

DU PONT
REG. U. S. PAT. OFF.

Color Conditioning

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

SEND FOR
free 32-page book, "Color Conditioning for Industry."

Mail coupon to:
E. I. DU PONT DE NEMOURS & CO. (INC.),
FINISHES DIVISION, WILMINGTON 98, DEL.

*Name*_____
*Firm*_____
*Address*_____
*City and State*_____

TI-811

B. F. PERKINS & SON, Inc.
HOLYOKE, MASS., U.S.A.
LARGEST MANUFACTURERS OF CALENDER ROLLS IN THE WORLD

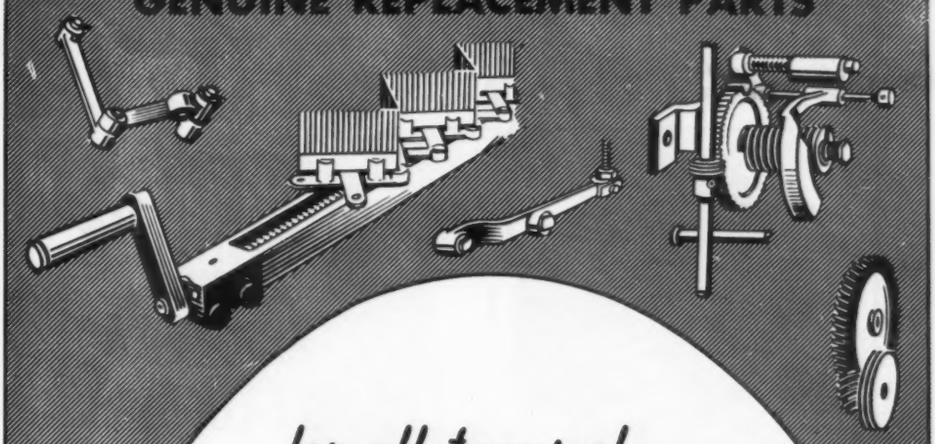
U.S.A. A recent report was that a quantity of German cotton goods had been sold in this country at prices below the prevailing quotation. A group of American cotton manufacturers explained to Under-Secretary of the Army William H. Draper, Jr., that importation of German goods into this country would be detrimental to American textile plants, and consequently to national security. General Draper said that there was the need for restoring in part the German economy to relieve American taxpayers of financial responsibility, but agreed that in so far as possible, the goods should be disposed of in markets other than American. Personnel to assist the army in disposing of German textiles are expected to be appointed in the near future.

Earnings in Cotton Goods Industry. Average hourly earnings of production operatives in the southern cotton goods industry have increased 179% during the last 10 years, according to the Bureau of Labor Statistics. Hourly earnings of northern operatives

---

Celanese Corp. of America manufactures the new high-tensile strength synthetic yarn called Fortisan which was used to make this spinnaker sail of non-oscillating design. Sail cloth woven with this yarn is dimensionally stable — which, of course, is a textile technologist's way of saying that water won't make it shrink and wind won't cause it to stretch.

GENUINE REPLACEMENT PARTS

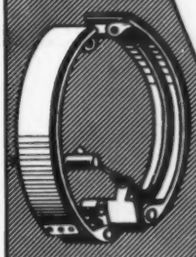


for all types of
Saco-Lowell Warpers

We are the official source of supply for Saco-Lowell Warper replacement parts. We also have complete tooling, plus trained personnel to supply all replacement parts for

ENTWISTLE WARPERS

Supplying your needs for replacement parts of the above warpers — as well as our own make — is an important and very active part of our business. We can assure you prompt attention and intelligent handling of your inquiries.



REQUEST CATALOG of Warpers, Beams, and Parts List.

★
Cotton and Rayon Beam Warpers
Ball Warping Machines
Narrow Fabric Warpers
Intermediate Dresser Stand for Woolen and Worsted Warp Yarns
Expansion Neck Reeds
All types of Expansion, Warper, Beamer and Slasher Combs
Replacement parts for Saco-Lowell and Entwistle Warpers
★

Good Warps are made on Good Beams

ALLEN COMPANY

General offices — 156 River Road
New Bedford, Mass.

Representatives in all Textile Localities and all Principal Countries of the World.

decrease SHUT-DOWNS!

UNBRAKO

Reg. U. S. Pat. Off.

KNURLED SELF-LOCKING

Square Head Set Screws

The "Unbrako" SELF-LOCKING Square Head Set Screws, as shown, are "real fasteners" . . . they positively *will not* shake loose! A loose "fastener" *invariably causes* shut-downs, *invariably causes* loss of production, and *invariably causes* increased maintenance, all of which cost money—each of which these "Unbrako" Screws absolutely prevent. Why?—because of the popular "Unbrako" Knurling feature—which is incorporated on the internal cup point (A), and on the external cup point (B) . . . making these "Unbrako" Square Head Set Screws SELF-LOCKERS. If and when the head of an "old style" square head set screw twists off, just to get it out costs many times the price of the screw these days . . . especially if it's in an awkward place! But the "Unbrako" Square Head Set Screw, made of a special alloy steel, is a "brute" for strength—it's practically *impossible* to twist its head off—thus, helping to reduce the cost of maintenance materially.

Write us for the name and address of your nearest "Unbrako" Industrial Distributor and for your copy of the "Unbrako" Catalog.

Knurling of Socket Screws originated with "Unbrako" in 1934.

"HALLOWELL" KEY KIT

You can't tighten or loosen socket screws without a hex socket wrench, so why not get our No. 25 or No. 50 "Hallowell" Hollow Handle Key Kit which contains most all hex-socket bits.

"UNBRAKO" SOCKET SET SCREW WITH KNURLED CUP POINT

"WON'T SHAKE LOOSE"

The Knurled Cup Point of the "Unbrako" Socket Set Screw makes it a Self-Locker—positively will not shake loose—even when subjected to extreme vibration! "Unbrako" Socket Screw Products are available in Stainless Steel and other metals or metal alloys.

"UNBRAKO" SOCKET SET SCREW WITH KNURLED THREADS

The Knurled threads of this UNBRAKO "Won't Shake Loose" Socket Set Screw make it a Self-Locker, too, for use where the point does not lend itself to knurling.

"FLEXLOC" SELF-LOCKING NUTS

"WON'T SHAKE LOOSE"

Because it is one-piece, all-metal, full-threaded and resilient . . . and, because it is a rugged "Stop", "Lock" and "Plain" nut all in one—processed to have an exceptionally uniform torque and long life—the "Flexloc" is becoming widely accepted. Request samples.

OVER 45 YEARS IN BUSINESS

*Pat'd and/or Pats. Pend.

STANDARD PRESSED STEEL CO.

JENKINTOWN, PENNA. BOX 582

BRANCHES: CHICAGO DETROIT INDIANAPOLIS SAN FRANCISCO ST. LOUIS

in the same industry have risen 164% during the same period. Average work week was almost 39 hours in the South in June 1948, and approximately 40 hours per week in the North.

Tell Your Employees. According to repeated surveys, news about the company ranks first among the things employees like to see in their employee magazines and newspapers. In order to assist executives to obtain improved understanding and cooperation that comes from well-informed employees, the Metropolitan Life Insurance Co., 1 Madison Ave., New York 10, N. Y., has made a study of the methods being used to keep employees informed about their company. Findings of the study have been published in a report, "Telling Employees about Business Operations," available upon request.

Expanded Cotton Use Seen in Shoe Industry. Prospects for enlarging cotton's 120,000-bale annual market in the shoe fabricating industry were detailed in a recent survey of 35 top shoe manufacturers and suppliers, according to the National Cotton Council. Such developments as vinyl resin fabrics and electro-coated cottons were regarded by shoe manufacturers as a shot in the arm for cotton. Vinyl resin fabrics were reported to be superior to leather in many quality characteristics, and have a definite advantage in price. Electro-coated cottons were commended for their superior performance.

Textiles from Peanuts. Plans to produce Ardil, Britain's new peanut cloth, at the rate of 10,000 tons yearly have been announced in London. This synthetic material, which is claimed to have all the advantages and none of the disadvantages of wool, is said to be moth-proof, crease-proof, resilient, soft, warm to the touch, dyes like wool, and absorbs moisture like wool. Ardil is expected to be cheaper than wool, but is said to be complementary rather than competitive to wool. Said to be used to greatest advantage in

How to Cut Down Production Headaches

WITH AN EFFICIENT

Walton

HUMIDIFICATION SYSTEM

Uniform humidity is a major factor in the problem of keeping materials and machines running smoothly at high speeds, eliminating costly stoppages traceable to static, breaks, and securing uniform quality of products.

When you consider Humidification for your plant remember these important *Walton Features* that will save you time, trouble and needless expense.

- Walton Humidifiers are factory-assembled units that can be installed over-night.
- They require only connections for electric current and water supply.
- They are adaptable to any location, because several types of standard vapor directional distributing domes are available.
- Uniform automatically controlled operation is available for each group of four heads. Costs little but assures completely uniform conditions.
- Improved filter-type models remove lint externally, for easy maintenance without interference with normal operation.
- Draftless distribution of vapor so fine that wet spots do not exist.

WALTON LABORATORIES, Inc.
Irvington 11, N. J. *Please Refer to TI-11-48*
Please send me a FREE copy of the informative, illustrated booklet, *"Industrial Humidification."*

NAME_____
FIRM_____
STREET_____
CITY_____ STATE_____

TESTED IS TRUSTED

What was its Tensile Strength?

*Scott Tester Model J tests finished cords, tapes, fabric, twine, etc., as well as yarn in skein or single end, up to 500 lbs. tensile. World-standard tests; "picturized" graph results.

"Adequate Testing Always Pays"

*Registered Trademark

SCOTT TESTERS, INC.

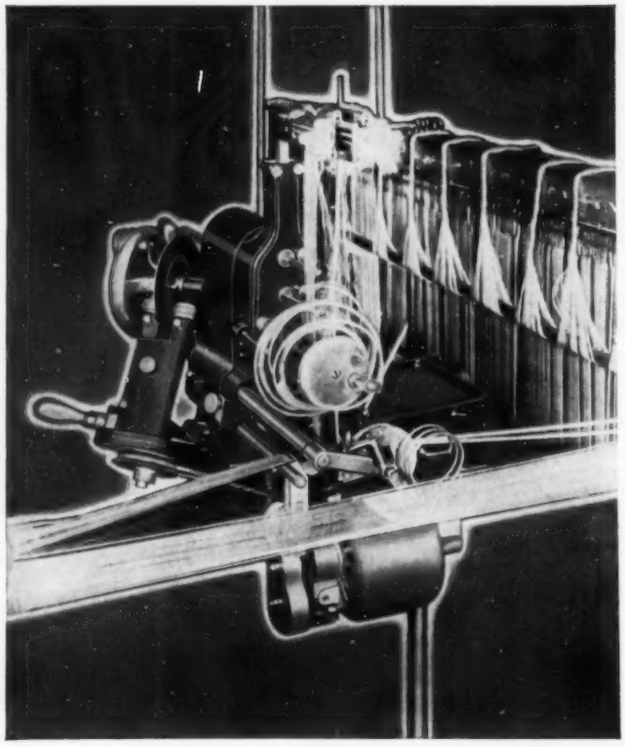
60 BLACKSTONE ST. PROVIDENCE, R. I.

Southern Representative

JOHN KLINCK

304 W. Forest Avenue North Augusta, S. Car.

Standard of the World



THIS TWISTING-IN MACHINE ASSURES CLEAN WARPS

Because—

- You can see ends when twisting-in or knotting.
- You can SEE whether proper ends are being tied together.
- Because it operates with ends under tension, you avoid rolled and twisted yarn.

Other Features

- Handles rayon, acetate, and nylon, — including fine deniers — and silk.
- Operates equally well in, or away from loom.
- Motor driven for greater production and easier work for operators.

Also Manufacturers of:

High-Speed Overend Creels, High-Speed Horizontal Warpers, High-Speed Cotton System Warpers, High-Speed Winders and Redraws, High Speed "Duo-Twist" Uptwister, Tensometers, Densimeters, Static Eliminators, Semi-Automatic Leasing Devices.

ITS A TRADE MARK SIPP EASTWOOD

SIPP-EASTWOOD CORPORATION

45 KEEN ST., PATERSON, N. J.

a 50-50 blend with the natural material, the resultant fabric is scarcely distinguishable from 100% wool. It can also be mixed with cotton and rayon, changing the character of the final fabric and adding warmth and crease-resistance to the cloth, it is reported.

AATCC Seeks Research Funds. The American Association of Textile Chemists and Colorists has launched an intensive nation-wide drive for a 50% increase in contributions to its research funds, by member companies, according to an announcement by Emmett Driscoll, Turner Halsey Co., 40 Worth St., New York City, who is chairman of the organization's national corporate membership committee. The present list of contributing member firms numbers more than 300, representing a cross-section of the textile industry. Much of the research work sponsored by the association is accomplished at comparatively low cost because a great deal of the time of technicians is contributed voluntarily.

Import Restrictions Placed on Textile Commodities by Cuba. According to information received from the Office of International Trade, U. S. Department of Commerce, importers of textiles in Cuba must not register in the registry for textile manufacturers and imports, and apply to the import-export division of the Ministry of Commerce for permits to import, attaching five samples of goods, each ten centimeters square, giving the name, address, habitual exports registry number in the registry of exports in the Cuban consulate, and export certificate of the Cuban consulate verifying the current export market price. The approved copy of the permit and sample will then be transmitted to the Cuban consulate for attachment to certified consular documents. Textiles affected by the action include raw and spun cotton as well as many kinds of fabricated products. Those interested in the list of commodities affected are advised to get in touch with the nearest Department of Commerce office.

MATERIAL HANDLING *News*

Reelected!-- by a ROUSING MAJORITY: the CLARK ELEC-CARLOADER!

Campaigning squarely on its record for versatile usefulness and exceptionally low cost, the Clark Elec-Carloader has been enthusiastically endorsed by World Industry as the outstanding materials handling machine of its kind.

More efficient storage and huge savings of time are obvious benefits of the Clark Method.

The preference it enjoys is a tribute to the Elec-Carloader's usefulness in Industry's program of increasing productive capacity within existing facilities; of accelerating output by speeding the flow of materials through processing, warehousing and transit; and of realizing vast potential savings.

The Elec-Carloader, with its 4000-lb. capacity, is a particularly effective combination of the famous Clark Carloader —outnumbering any other model of fork lift truck manufactured! — and electric battery power, as developed by Clark. Bred into it are Clark's mass production of component parts and of complete machines; Clark's maximum interchangeability of parts; and Clark's unparalleled automotive and materials handling experience.

To get the facts about the Elec-Carloader is to understand the beneficent revolution that is taking place in Industry's handling of materials. They are facts worth knowing, and are readily obtainable from a man worth knowing: a Clark field representative. It's a boon to any business to CONSULT CLARK.

Speed is the money-saving Clark keynote—in storing materials, in getting them out again.

CLARK ELECTRIC AND GAS POWERED FORK TRUCKS AND INDUSTRIAL TOWING TRACTORS

INDUSTRIAL TRUCK DIV., CLARK EQUIPMENT COMPANY BATTLE CREEK 61, MICH.
REPRESENTATIVES IN PRINCIPAL CITIES THROUGHOUT THE WORLD
AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATEGIC LOCATIONS

THE NATIONAL GUARD DEFENDS AMERICA—JOIN NOW

"We converted our accounts receivable into ready cash"

Many firms, using the Trust Company of Georgia Factoring Service, have been able to increase their working capital turnover without outside help.

Factoring provides extra capital by converting accounts receivable into ready cash. You receive cash promptly on each shipment —regardless of the terms of your industry.

OUR BUSINESS IS HELPING YOURS

Let us explain how factoring can help you increase your sales volume and profits by providing the cash you need for expansion.

FACTORING DIVISION

TRUST COMPANY OF GEORGIA

ATLANTA, GEORGIA

NEXT DOOR TO EVERY MILL IN THE SOUTH

Just Out!

Mount Hope PRECISION GUIDER

A NEW HIGH IN CLOTH GUIDING

This brand new Precision Cloth Guider makes it possible to automatically control the lateral movement of cloth, within closer limits, than ever before possible.

This precision control is made possible by an entirely new principle in cloth guiding, — a fluted selvage wheel which is contacted and turned by the selvage. The wheel actuates a rack which, in turn, actuates the tilting of nip rolls to guide the cloth toward or away from themselves as required. The result is practically instantaneous reaction and safest handling of goods, even the most delicate.

The Guider is purely mechanical; no coils to burn out or air valves to clog. It has wide adaptability, is rust proof, water proof, and has reversible Neoprene rolls.

Send for Bulletin No. SG-PG.

MOUNT HOPE MACHINERY CO.
42 Adams St., Taunton, Mass., U. S. A.

REPRESENTATIVES: Parkman Collins Company, Boston—for Maine; Ingalls Engineering Company, Providence — for N. H., Mass., R. I., and Conn.; John H. Andresen, Inc., Paterson — for Southern N. Y.; N. J., and Pa.; Slaughter Machinery Co., Charlotte — for the South; S. S. Wilson, 1737 Howard St., Chicago — for Mid-West; Sidney Springer, Los Angeles — for California; W. J. Westaway, Limited, Hamilton and Montreal—for Canada.

WHAT THE

TEXTILE MILLS

ARE DOING

The board of directors of **Textron, Incorporated,** has approved a $12,000,000 program for the expansion of their apparel lines for 1949 and has voted to discontinue the manufacture of sheets and blankets at Nashua, N. H., where the mills are to be closed. The program will include new mills and sewing plants in South Carolina, Georgia and Puerto Rico.

Puritan Weaving Plant of **Burlington Mills Corp.,** Fayetteville, N. C., has received a second accident prevention award from Liberty Mutual Insurance Co. for having completed two million man hours of operation without a lost-time accident.

U. S. Rubber Company has announced its entrance into the apparel cloth field with the production of new cotton and rayon fabrics for men's and women's apparel. The fabrics are being woven at **Seaboard Mills,** Burlington, N. C.

The Joanna (S. C.) Foundation is sponsor of raising the funds and guaranteeing operating costs for the $100,000 memorial hospital, now in course of construction, for residents of the Joanna community.

Columbia Weaving Mills, Inc., Paterson, N. J., cloth tapes, has arranged with the Anniston (Ala.) Committee for Industrial Development for the erection of a one-story building in Anniston to be used as a new mill. The cost is estimated at close to $100,000, with equipment.

American Thread Company, Atlanta, Ga., has removed the warehouse and branch office at 217 Pryor St. to a new building at 1052 Peachtree St., where increased space and facilities have been provided.

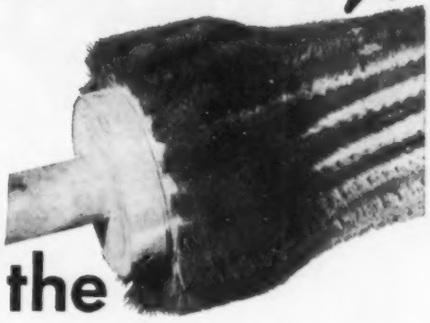
Berwick Mfg. Co., Inc., New York, N. Y., textile printing, has leased a floor in a building in Newark, N. J., and will equip and occupy for expansion.

Artloom Carpet Corp., Philadelphia, Pa., has let general contract for a one-story addition to be used

Don't throw it away.

Just let us

RENEW the



BRISTLE

use

METLKOR

(TRADE MARK Reg. Pending)

When the bristle on your "Metlkor" brush wears down, there's no need to buy a new brush. Return the old brush to us for rebristling.

Why pay for an entirely **new brush,** when you need only **new bristle?**

By our patented method worn bristle is stripped from the brush, the metal spindle or core is cleaned, and new bristle is put on the core.

The brush is as good as new

This sensible economy feature of "Metlkor" brushes appeals to woolen, cotton and rayon mills and textile printers. "Metlkors" are used by cotton and rayon weavers for brushing machines and shears, by woolen manufacturers for shears, presses, brushing machines, cards, etc., by printers for furnishing color and for blanket washing.

It will pay you, too, to use these economical brushes

←Write today for catalog showing the complete line of Jenkins brushes for the textile industry.

The Cores

of "Metlkor" brushes are made of cold-drawn steel or aluminum. They cannot sag or get out of alignment.

•

Bristle

Is put on "Metlkor" brushes by our patented process that makes them moisture proof, easy to keep clean, and good for long, efficient use.

JENKINS MAKES THE FOLLOWING BRUSHES:

- Furnisher
- Flock
- Raising
- Laying
- Shearing
- Brushing
- Pressing
- Blanket Washing

etc.

M. W. JENKINS' SONS, INC.

Manufacturers of Industrial Brushes Since 1877

CEDAR GROVE, ESSEX COUNTY, NEW JERSEY

VICTOR MILL STARCH

The Weaver's Friend

Golden Anniversary

THE KEEVER STARCH CO.
1898-1948

★ PENETRATES THOROUGHLY

★ DEPENDABLE

★ CARRIES WEIGHT INTO THE FABRIC

★ ALWAYS UNIFORM

★ BOILS THIN

Distributed by

TEXTILE SALES DIVISION
1200 Woodside Bldg.
Greenville, South Carolina
CHARLES C. SWITZER
Division Manager

F. M. WALLACE
Birmingham 9, Alabama

L. J. CASTILE
Charlotte 3, North Carolina

E. HAYS REYNOLDS
Greenville, South Carolina

THE KEEVER STARCH COMPANY

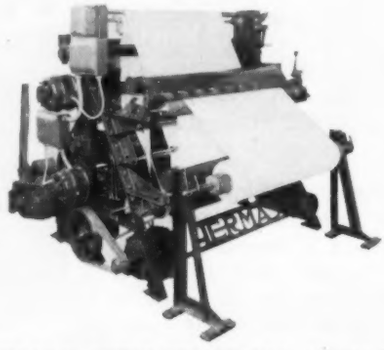
COLUMBUS 15, OHIO

COMPLETELY REDESIGNED for MODERN REQUIREMENTS

HERMAS

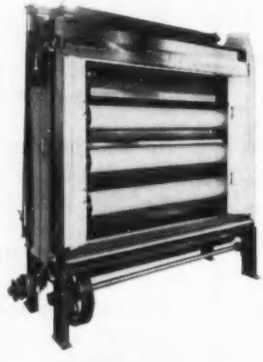
CLOTHROOM MACHINES

—have all been redesigned to synchronize clothroom processes and speed up production.



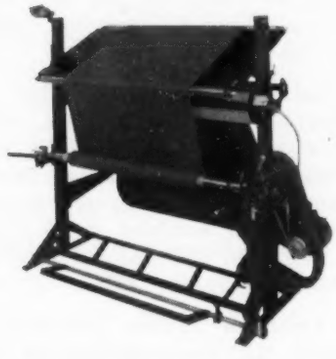
HERMAS NEW VERTICAL SHEARS

—remove all hanging threads from both face, back and selvages of the cloth in a single operation.



HERMAS BRUSHES

—give controlled pressure to meet the varying brushing needs of fabrics of all weights and types.



HERMAS INSPECTING AND EXAMINING MACHINES

—include types for all purposes.

The Full Hermas Line Includes: shears, brushes, inspecting machines, rolling and sewing machines, scrays, etc.

HERMAS MACHINE COMPANY

America's Only Specialists in Clothroom Equipment

Hawthorne **New Jersey**

REPRESENTATIVES:

Carolina Specialty Company
Charlotte, N. C.

Ross Whitehead & Co., Limited
Toronto and Montreal, Canada

Robert H. Kelley
84 Union Street
Milford, N. H.

Unisel, Ltd.
Manchester, England

Robert R. Simpson
498—12th Ave.
Paterson, N. J.

EXPORT DIVISION
Francis H. Love
57 William St., New York City

Courtesy, General Electric Co.

Erwin Cotton Mills is reported to have standardized a number of manufacturing operations in their No. 3 plant at Cooleemee, N. C., by means of this recording spectrophotometer. The instrument is used to test the strength of liquid dyestuffs, match colors, standardize colors, measure color content of fabrics, and test whiteness of bleached cloth.

for warehouse service. The cost is reported as close to $100,000, with equipment.

Peerless Mills Co., Inc., Pawtucket, R. I., rayons and satins, has arranged for an increase in capital stock to $1,000,000, for general expansion.

Sun-Set Cord, Inc., has been chartered with a capital of 500 shares of stock, no par value, to operate a mill in Providence, R. I., for the manufacture of cordage, webbing, etc. Eugene T. Lachapelle, Pawtucket, is the principal incorporator.

Springs Cotton Mills, Lancaster, S. C., have approved plans for a one-story modern, windowless-type addition, to be equipped as a spinning mill. Installation will include long-draft type spinning machinery, with 40,000 spindles, and auxiliary equipment. The cost is reported to be in excess of $1,000,000.

Monarch Mills, Ottaray Plant, Union, S. C., rayon fabrics, have let contract for an addition, reported to cost over $200,000, with equipment.

Graniteville (S. C.) Co., drills, twills, ducks, etc., has approved plans for the construction of a one-story addition to the mill in Vaucluse, S. C., estimated to cost close to $250,000, with equipment.

Burlington Mills Corp. has let general contract for a two-story addition to the **Altavista (Va.) Mills,**

Control Costs with TOLEDO ACCURACY

Let modern weighing equipment take the guess-work out of your textile production lines! At every step . . . Toledo Scales can help you guard your costs. Toledos "fit the cloth" of modern textile needs . . . with dependable automatic weight indication to give the *speed* and *accuracy* essential to material and production control. Toledo Scale Company, Toledo 12, O.

Send for this ➡ New illustrated bulletin No. 2020 shows Better Ways to control costs.

TOLEDO

HEADQUARTERS FOR SCALES

BARBER COLMAN

THE NEW

ELECTRONIC MOISTURE CONTENT CONTROLLER

A "UNIVERSAL" INSTRUMENT

FOR SLASHERS RUNNING ANY YARN

The new Barber-Colman *Electronic* Moisture Content Controller is applicable to slashers of all types which are processing warps of all kinds including cotton, spun rayon, viscose, acetate, aralac, or worsted wool, or any combinations of such yarns. Thus it will provide accurate automatic control of slashing in any mill, regardless of the type of yarn, count or denier, or size of beam. The moisture content of beams prepared for the weave room can be held within extremely close limits, and with reliable uniformity regardless of any changing conditions.

FOR ANY VARIABLE SPEED DRIVE

The control circuits of the new Barber-Colman *Electronic* Moisture Content Controller are such that its governing action can be applied to *any* of the various types of variable speed drive in common use on slashers. The main purpose of the Controller is to adjust, constantly and automatically, the speed of the slasher so as to compensate for variations and produce a beam having a uniform and predetermined moisture content throughout. For detailed recommendations regarding the use of Barber-Colman equipment in your slasher room, we suggest you consult your Barber-Colman representative.

Quality plus . . . Know How

For further information, write for Bulletin F-3156.

BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS
BOSTON MASSACHUSETTS • GREENVILLE SOUTH CAROLINA • GREENSBORO NORTH CAROLINA

rayon piece goods, to be equipped primarily as a pilot plant for dyeing and finishing service. A portion of the structure will be used for a warehouse. Cost of the project is estimated as over $200,000.

Chicago (Ill.) Curled Hair Co. has let contract for the reconstruction and improvements in three buildings at their plants Nos. 7, 8, and 9.

Goodall-Sanford, Inc., Sanford, Me., Palm Beach suitings and other fabrics, has active work in progress on an expansion and improvement program at the mills. The work includes additional buildings, with machinery and facilities for a large increased output, and is an investment of about $5,500,000.

Pilgrim Fabrics, Inc., Boston, Mass., has been chartered with 1,000 shares of stock, no par value, to manufacture cotton and woolen specialties. D. Yuman is the president.

Walker Dyeing & Finishing Co., Inc., Fall River, Mass., has been inincorporated with 120 shares of stock, no par value, to operate a dyeing, printing and finishing mill. Robert C. Walker is president.

Heminway & Bartlett Mfg. Co., Watertown, Conn., silk and nylon threads, has taken out permit for a one-story addition to be equipped as a dryer shed.

Banning (Ga.) Cotton Mills, inactive for some time past, have been acquired by C. E. Goodroe, Dalton, Ga., and operations will be resumed at once. It has been announced that production will be given over to yarns, as heretofore.

Eagle & Phenix Mills, Columbus, Ga., have plans to make extensions and improvements in the mill, including installation of additional equipment.

Sabattus (Me.) Woolen Mills, previously inactive, have been acquired by Deena Woolen Mills, Inc., Lewiston, Me., and will operate as a branch mill for the manufacture of mackinaw cloth and kindred materials.

Norman Gallagher, Dexter, Mich., has taken over the recently vacated plant of Detroit Waste Works, Dexter. Improvements will be made and a cotton mill established for the manufacture of towels, etc.

Cocheco Woolen Mfg. Co., East Rochester, N. Y., has plans under-

way for a four-story addition to the mill in Lebanon, Me., for expansion in the spinning, carding and other departments. The cost is reported to be in excess of $450,000, with equipment.

Gambrill & Melville Mills Co., Bessemer City, N. C., wide sheetings, has authorized a modernization and expansion program at the mill. New long-draft spinning and carding equipment, pickers, blenders, high-speed warpers and other machinery, will be installed. The project is reported to cost approximately $250,000.

Osage Mfg. Co., Bessemer City, N. C., twills, gabardines, etc., has plans to make extensions and improvements in the mill, and to install additional equipment.

A. C. Brackett, Shelby, N. C., is to head a project to construct and operate a one-story cotton mill at Casar, N. C., to be equipped for yarn manufacture.

Iredell Finishing Mills, Inc., Statesville, N. C., has been chartered with a capital of $100,000, to operate a finishing mill for cotton goods. D. Van Horn and R. A. Collier, both of Statesville, are the principal incorporators.

Delta Finishing Co., Philadelphia, Pa., has let contract for a one-story addition, to be used for dye house service, reported to cost about $75,000, with equipment.

A. G. Mercer Co., Lonsdale, R. I., has been chartered with a capital of 300 shares of stock, no par value, to manufacture machine laces, nets and kindred products. William H. Mackenzie, Pawtucket, is the principal incorporator.

Textron Southern, Inc., has let contract for a warehouse at Anderson, S. C., designed for a general storage and distribution center for various mills. The cost is estimated at about $500,000, with equipment.

Clearwater (S. C.) Mfg. Co., bleaching, dyeing, and finishing of cotton goods, has let contract for a one-story addition for a new locker and shower room for employees.

Fairforest Finishing Co., Spartanburg, S. C., has plans for extensions in the research laboratory, and for the installation of additional equipment to provide for a larger technical staff.

The **United Piece Dye Works,**

BARBER COLMAN

THE NEW

ELECTRONIC TEMCHRON

SIZE COOKING CONTROL

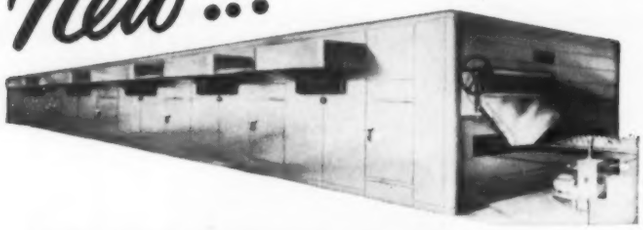
PROVIDES *IDENTICAL* CYCLING WITH QUICK, EASY CHANGE-OVER

TEMCHRON, the only *completely electronic* time-temperature cycle controller, provides hitherto unattainable accuracy, flexibility, and reliability in the control of size cooking. Identical cycling is assured from batch to batch, for any dial settings, yet simple adjustments permit cycle changes as required by different size formulas. Changes in any part of the cycle — warm-up time, cooking temperature, cooking time, or holding temperature — can be made *by simply resetting calibrated dials.* Lights on the panel indicate when the size mixture is being raised to cooking temperature, when the size is cooking, and when the cooking is completed and the mixture is at the desired holding temperature. Cooking and holding temperatures are independently adjustable within a range of 100°F to 210°F. Length of warm-up time is adjustable from 15 to 90 minutes, and cooking time from 20 to 180 minutes. *Quality plus . . . Know How*

For further information, write for Bulletin F-3054.

BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS
BOSTON MASSACHUSETTS • GREENVILLE SOUTH CAROLINA • GREENSBORO NORTH CAROLINA

New...



"NATIONAL" SR-4 TENTER DRYER

Smart Appearance...Matched By Productive Efficiency!

The newly designed exterior of the SR-4 is thoroughly in keeping with its superior engineering features, including: Adjustable volume fans, individual unit control, fine-mesh filter screen and easy accessibility to all parts of dryer and frame. Designed for compactness, long service life and complete dependability . . . and *to deliver greater drying capacity at lower drying costs.*

NEW SWATCH DRYER

For accurately testing the effects of drying and curing on colored fabrics. This small, compact machine duplicates actual conditions found in full-size dryers. A practical, economical testing unit that may point the way to big savings in drying and curing costs.

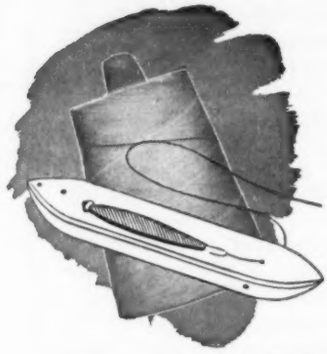
Send for Our New Descriptive Folder

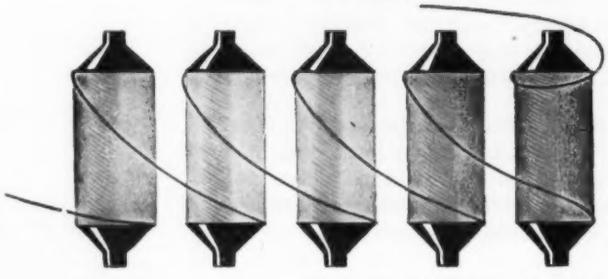
Tenter Drying Systems
Print Goods Dryers
Yarn, Skein and Stock Dryers
Chemical Dryers

THE NATIONAL DRYING MACHINERY CO.

N. HANCOCK ST. and LEHIGH AVE., PHILADELPHIA 33, PA.

New England Agent—C. H. INGALLS, Providence, R. I.





Textile ENGINEERING

Plans and designs for all types of projects related to the textile industry. Appraisals, modernization studies, machinery layouts, air-conditioning, power and water filtration plants, and other phases of textile engineering.

ROBERT AND COMPANY ASSOCIATES
INCORPORATED
Architects and Engineers
ATLANTA

THIRTY YEARS' NATIONWIDE EXPERIENCE IN INDUSTRIAL AND TEXTILE DEVELOPMENT

New York, N. Y., has announced that "Unisec" is the newest member of its family of special finishes, claiming the following advantages: water repellency; crease resistance; extra and body fullness, resilient suppleness, stretch-and-sag control, plus a wool-like hand; free ventilation; and resistance to soil, perspiration, and non-oily spots.

Callaway Mills, Inc., has announced the availability of their Valtwist and Special Loop Twist rug lines, which feature backs coated with a solution that prevents slipping on floors.

Avery Worsted Co., Inc., New York, N. Y., is a new concern entering the worsted yarn field. This company's pilot plant, **Bedford Process Corp.,** New Bedford. Mass., has been engaged during the past two years in the experimentation and development of a new type of process which, unlike the "American System," begins at the raw wool stage. The pilot plant has a complete laboratory for quality control at all stages of manufacture. It is now operating on 2/40's weaving yarn, 64-70's quality. Full production is scheduled to begin in the fall of 1949.

The **Lymansville (R. I.) Co.** has recently invested in excess of two million dollars in modernizing all departments of the mill. A new building has been constructed for the finishing department, and new equipment and machinery purchased.

Susquehanna Woolen Mills, Inc., New Cumberland, Pa., has been sold at auction for $31,500, to C. C. Davis who operates a construction company and intends to use the

When You Want SPECIAL Stiffening Effects

IF you are seeking new ideas in sizing and stiffening . . . don't overlook the Xyno Resins! These water dispersions of thermoplastic synthetic resins can be manipulated (alone or in combination) to provide a uniquely wide range of effects in stiffness from extreme to moderate. They are also used with other Onyx materials to provide even greater versatility of finishes.

Xyno Resin AA 40 is a versatile general purpose, water-thin dispersion of especial interest to finishers of ribbons and piece goods in cotton, rayon and acetate.

Xyno Resin S 69 is another water-thin dispersion offering an unusual "springy" hand for fabrics, and particularly for nylon and other nettings.

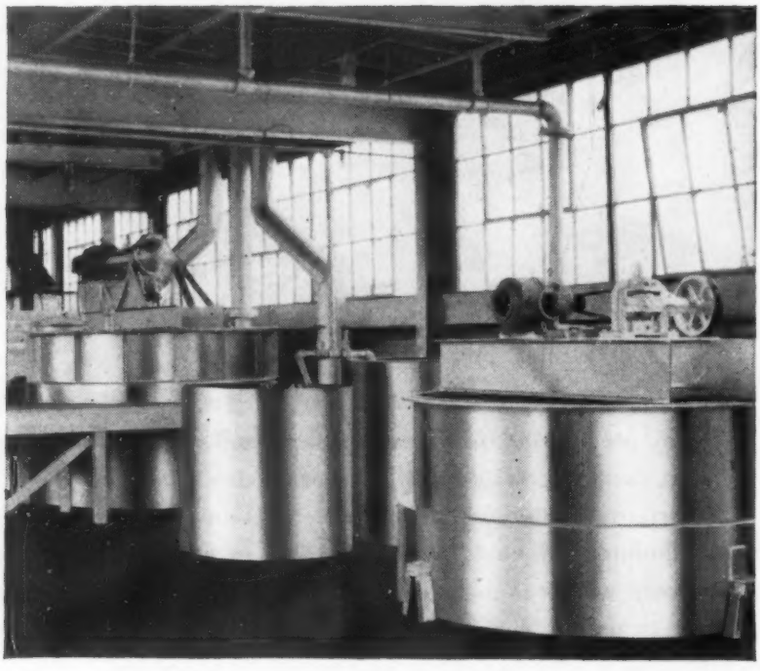
Xyno Resin 362 is a viscous dispersion used for exceptional stiffness requirements, particularly on ninons, organdies, marquisettes and on cotton, rayon, acetate and nylon constructions generally.

Ask for Onyx Technical Data Sheets for Xyno Resins AA 40, S 69 and 362.

ONYX OIL & CHEMICAL COMPANY
JERSEY CITY 2, N. J.
CHICAGO • PROVIDENCE • CHARLOTTE • ATLANTA
In Canada: Onyx Oil & Chemical Co., Ltd., Montreal, Toronto, St. Johns, Que.
For Export: Onyx International, Jersey City 2, N. J.

onyx
CHEMICALS FOR TEXTILE FINISHING

PLAY SAFE
USE
Stainless Steel



BEING NON-CORROSIVE, *Stainless Steel* tanks and vats will permit colors to run true in successive runs, and allow the use of almost any dye or chemical by remaining unaffected through metallic contamination. Let *Stainless Steel's* strength, lower repair costs and longer life repay the initial costs and reduce the costly maintenance overhead.

***Truitt's engineering service* in the fabrication of carbon and stainless steel is available to the textile, chemical, pulp and other industries without charge. Whether your need be tanks, vats or other equipment, remember . . . *Truitt, one of the South's largest fabricators,* will gladly figure your job, without cost or obligation.**

TRUITT
MANUFACTURING COMPANY
• GREENSBORO, NORTH CAROLINA •

Fabricators of Solid Stainless Steel and Stainless-Clad Tanks • Dyeing Vats • Washing Tanks • Steam Drums • Storage Tanks for Acids and Alkalis • Mechanical Agitators • Separators • Stainless Steel Trucks • And Many Other Stainless Steel Products.

mill building for a warehouse.

Gibson Woolen Mills, Tilton, N. H., were recently sold to the M. T. Stevens division of J. P. Stevens & Co.

Kenella Label Corp. is a new concern now in full production in Paterson, N. J., weaving labels on four specially constructed new looms. Kenneth Leer is president and treasurer; Nicholas Mannarino, vice-president; and Charles Kopp, secretary.

Mercury Woven Label Co., is a new corporation now in production at Hawthorne, N. J.

Cluett, Peabody & Co., Inc., Troy, N. Y., has opened a new one million dollar research and science building, in which is contained a complete miniature textile industry, from raw fibers to finished garments.

Crown Woolen Mills Corp., previously known as Crown Mills, Marcellus, N. Y., has certified the revival of its corporate existence.

Lane Cotton Mills Co., New Orleans, La., has been acquired by M. Lowenstein & Sons, Inc., and marks the latter's first venture into the colored yarn goods business. No change in the management, personnel or production policies of the Lane company is contemplated.

Roosevelt Mills, Inc., yarns, and **Manchester (Conn.) Knitting Mills, Inc.,** outerwear, have been merged under the first noted name. It is understood that both mills will continue in operation as heretofore.

The recently organized **Ramie Industries, Inc.,** Belle Glade, Fla., has plans under way for the construction of a one-story mill, reported to cost close to $100,000, with equipment. Russell T. Edwards, consulting engineer from Miami, Fla., is in charge.

Ayers Mfg. Corp., Boston, Mass., has been chartered with a capital of 5000 shares of stock, no par value, to manufacture cotton and rayon goods. Norman C. Ayers is president.

Dahlman Coated Fabrics, Inc., New York, N. Y., has been incorporated with a capital of 200 shares of stock, no par value, to operate a textile processing plant. N. E. Dahlman is the principal incorporator and representative.

Dolph Dye Works, Inc., New York. N. Y., has been organized with a capital of 200 shares of stock, no par

value, to operate a textile dye works. S. P. Rappaport is attorney and representative.

Newton (N. C.) Rayon Mills, a subsidiary of Burlington Mills Corp., has approved plans for a two-story addition to the mill, reported to cost over $140,000, with equipment.

Stern & Stern Textiles, Inc., Stewart division, rayon fabrics, has plans for a housing development for employees at the mill in Easton, Pa. Comprising a number of one-story dwellings, the entire project is reported to cost about $250,000.

Steere Mill, Providence, R. I., woolen goods, has awarded a general contract for a one-story addition.

American Worsted Mills, Inc., has been chartered with a capital of $100,000, to operate a mill in Pawtucket, R. I.

Textron Southern, Inc., Charlotte, N. C., has leased a one-story building at Belton, S. C., now in course of erection, and will occupy for the manufacture of wool and rayon blends.

Brandon Corp., print cloths, duck, etc., has purchased a plot of land in Greenville, S. C., and has plans for future expansion.

Pickens (S. C.) Mill, sheetings, has let contract for a one-story addition to be equipped as an opener unit.

Monarch Mills, Union, S. C., print cloths, has let contract for the installation of an air conditioning system in the spinning and weaving departments, estimated to cost about $116,000.

Tropical weight fabrics will be featured in a large scale advertising campaign that **Crown Manufacturing Co.,** Pawtucket, R. I., is inaugurating to promote their blended fabrics. Crown is one of the large New England mills spinning woolen and blends on the cotton system.

The 13-story building purchased last year by **Botany Mills,** Passaic, N. J., to house executive offices and sales rooms has been remodeled partially. Renovations will have been completed by the first of the year, at which time occupation of all departments will have been completed.

Three of 16 departments of the **Graniteville (S. C.) Co.,** have reported a total of 3,556,100 man hours worked without a lost-time accident, and have been presented Certificate Awards for Safety Record by the American Mutual Liability Insurance Co.

Beacon Textile, Inc., affiliated with Beacon Mfg. Co., Swannanoa, N. C., has consummated arrangements for the construction and operation of a plant for the manufacture of cotton and woolen blankets, to be located on the eastern shore of Puerto Rico. It will be comprised of a large main one-story building and several auxiliary structures. The initial installation will include about 100 looms and accessories. The Puerto Rica Industrial Development Co., San Juan, will provide funds for the construction of the buildings to an amount of about $700,000, with the machinery installation to be made by the Beacon company at a cost of approximately $800,000.

Paragon Worsted Co., Providence, R. I., woolen and worsted goods for men's wear, has taken out a permit for the construction of a top story addition to the present one-story building.

J. P. Stevens & Co., Inc., New York, N. Y., cotton goods, rayons, woolens, etc., has approved plans for the installation of a new mechanical pilot plant and testing laboratory in

TYPE DS PEERLESS *Centrifugal* PUMPS

PROCESS SERVICES

ABRASIVE AND CORROSIVE LIQUIDS

TYPE **DS**

ENCLOSED IMPELLER

Application:

The Type DS pump is a general purpose process pump with enclosed impeller. Handles clear liquids in a variety of services and solutions which may be corrosive. Single-stage, single-end suction design. Capacities: up to 600 g.p.m.; heads up to 231 feet; temperatures up to 212 F. All types of drive.

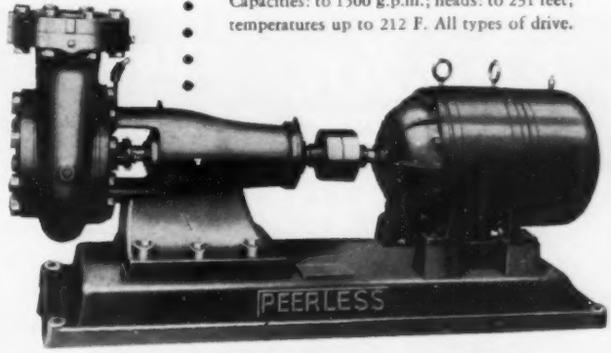
TYPE **DSO**

OPEN IMPELLER

Application:

The Type DSO pump has essentially the characteristics and applications as the Type DS. However, the Type DSO utilizes an open impeller with impeller vanes on back of shroud to permit pumping of fluids with solids in suspension, brines, sludges and the like. Capacities: to 1500 g.p.m.; heads: to 231 feet; temperatures up to 212 F. All types of drive.

Write for descriptive and illustated Bulletin No. 803.



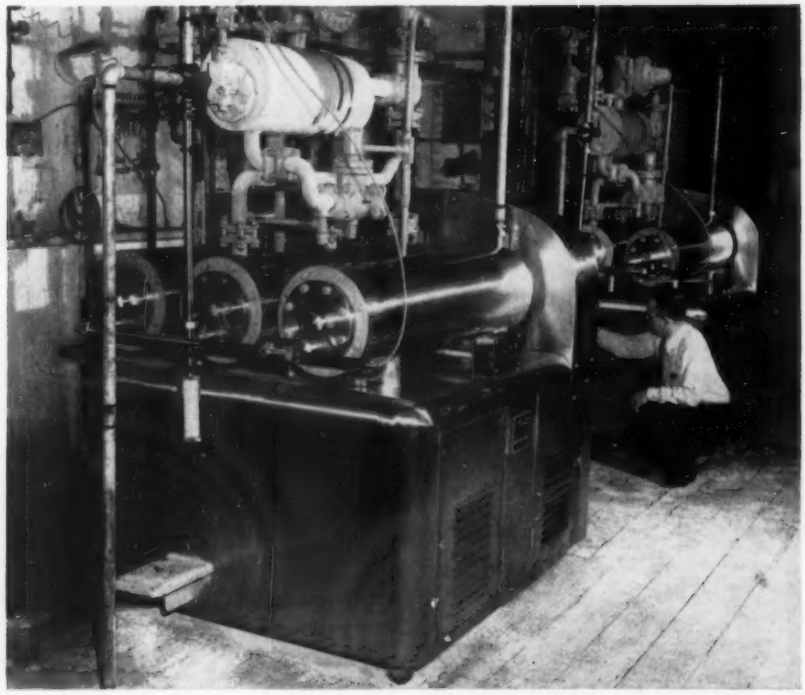
fmc PEERLESS PUMP

PEERLESS PUMP DIVISION

FOOD MACHINERY AND CHEMICAL CORPORATION

FACTORIES: INDIANAPOLIS, IND.; LOS ANGELES 31, CALIF.

District Offices: New York 5, 37 Wall Street; Chicago 40, 4554 No. Broadway; Atlanta Office: Rutland Building, Decatur, Georgia; Dallas 1, Texas; Fresno, California; Los Angeles 31, California



Faster processing of vat pastes and improved quality of textile printing is said to have resulted from the installation of this Votator starch processing apparatus at Jewett City plant of Aspinook Corp.

a one-story building at its Victor-Monoghan Co., Greenville, S. C. The new unit will be used for the development of equipment, processes and patents for use in the company mills.

Belding-Heminway-Corticelli Co., silk and rayon fabrics, spool silk, etc., has plans underway for a one-story addition to the mill in Bedford, Va., reported to cost in excess of $400,000, with machinery. An air-conditioning system will be installed

Johnston Mfg. Co., Charlotte, N. C., combed knitting yarns, has completed the erection of a two-story addition, and will proceed at once with the installation of considerable new machinery, including opening, cleaning, picking equipment and high-speed spooling machines.

Belle-Vue Mfg. Co., Inc., Hillsboro, N. C., shirtings, ginghams, denims, etc., has plans for further mill extensions and improvements in the future, supplementing a program now underway. The entire project represents a reported expenditure of about $500,000, up to the present time.

Gold-Tex Fabrics Corp., Rock Hill, S. C., colored cotton fabrics, has work underway on the installation of new drawing equipment and accessory apparatus; and a new fluorescent lighting system will be installed in the card room.

Pawtuxet Valley Dyeing Company, wool dyers of West Warwick, R. I., was recently sold to Heller Rayon Jersey Corporation. Budd Levison, head of the latter corporation, is now president of Pawtuxet. There were no other changes in personnel.

Twisted Products Co., Inc., Pawtucket, R. I., is now controlled by Lester E. Roberts and William Johnson who have been with the company for several years. In addition to commission reeling, winding, and twisting, the company has expanded to do commission burling and mending.

The West Warren, Mass., division of **Textile Printing Co. of Warren Inc.,** realized $40,000 at the auction sale of equipment and machinery held recently.

Star Mending Co., Lawrence, Mass., is a new concern doing commission mending and burling of woolen and worsted fabrics. Catherine Fielder and Lillian O'Conner are partners in the new concern.

Highpine Weavers, Highpine, Maine, is a new concern recently started by Paul Whitin, V, former general superintendent of Goodall-Sanford, Inc., Sanford Maine.

Rocky Mount Mills, Rocky Mount, N. C., fancy woven fabrics, have started construction to double its present plant capacity.

The first cotton mill in Haiti, W. I., has been placed into operation, according to Lockwood Greene Engineers, Inc., Spartanburg, S. C. The plant consists of four principal buildings.

Condor TEXTYL LINE RUBBER PRODUCTS

FOR THE TEXTILE INDUSTRY

Transmission Belts • V-Belts • Cone Belts • Rubber Covered Rolls
Rubber-Lined Tanks

Sand Roll Covering
Air, Water and Steam Hose
Acid Hose
Fire Hose
Vacuum Hose
Loom Strapping
Oilless Bearing Material

RAYBESTOS-MANHATTAN INC.
MANHATTAN RUBBER DIVISION
EXECUTIVE OFFICES AND FACTORIES PASSAIC, NEW JERSEY

HARTEX
QUALITY CHEMICALS FOR EVERY PHASE OF TEXTILE PROCESSING
HART PRODUCTS CORP.
1440 BROADWAY • NEW YORK CITY

CALCO dyelines

PUBLISHED BY AMERICAN Cyanamid COMPANY CALCO CHEMICAL DIVISION
Bound Brook, New Jersey
New York • Chicago • Boston • Philadelphia • Charlotte • Providence

PARIS OPENINGS FEATURE BLUES, BROWNS*

Important Fabric Colors for Next Spring, Fall

Color trends, as revealed in the Paris fashion showings held in August, promise to influence color selections in fabric designs for many months to come. For this reason, they should be of interest to all who are concerned with color in textiles.

While no single color dominated all of the many showings, the largest single color grouping was the blue family, in a range that included navy, sapphire, royal, French blue, sky blue and aqua. Dior singled out blue as his most important color, showing it repeatedly in day, afternoon and evening wear, either as a monotone or in iridescent effects combined with black or brown.

Supplementing the preference shown for blue, a trend away from the muted, grayed shades currently popular was evident everywhere. Colors were brighter, clearer, truer, with primaries forming the basis for the new shades. Molyneaux and Balmain favored red to a marked degree, the latter selecting Basque Red for special prominence. Like the blues, reds appeared in a wide range, going from deep shades to intense flame reds and magenta. For the most part, yellows were clear, too. These were prominent in combination with black at Piquet.

The family of browns, ranging from dark shades to beige, is another color group scheduled for a comeback after a prolonged absence in favor of grays and greens. And again, while the browns did not by any means obliterate the grays and greens, their prominence in the Paris showings indicates that they will score heavily, along with blues, in Spring and Fall color selections.

*Reported direct from Paris by a Calco representative.

New Vat Printing Brown Has Excellent Light-Fastness

Calcosol† Copper Brown Printing Paste is a new vat printing brown designed for use on cotton and rayon. It has exceptionally good fastness to light even in light pastel shades, as well as excellent fastness to washing, chlorine, Plissé, perspiration, and hot pressing. These properties make it very desirable for the printing of draperies and shirts.

Calcosol Copper Brown Printing Paste is recommended especially for light to medium shades, as it retains its redness and richness of tone even in pastels. Other vat printing browns usually go greener or duller in light prints.

This dye is especially effective in producing dusty rose shades, and it acts as a shading element in grays. Very fast-to-light dusty rose shades are produced with this dye when applied straight, and also when shaded slightly with other fast-to-light printing vat dyes.

A range of very fast printing grays can be produced by using Calcosol Gray 2GP Paste with Calcosol Copper Brown Printing Paste, or by shading this combination slightly with Calcosol Blue CCP Double Paste or Calcosol Violet BN Extra Paste. †Trade-mark.

More Dyes . . . Better Dyes

According to the U. S. Tariff Commission, production of dyes in this country totaled a new high record of 212,156,000 pounds, as compared to 186,000,000 pounds in 1946. The record is significant in view of the shortages of some coal-tar intermediates and inorganic chemicals which existed last year.

Of the 1947 total, 28.7% consisted of vat dyes, 20.5% direct dyes, 19.7% sulfur dyes and 11.0% acid dyes. The remainder consisted of mordant and chrome, azoic, basic, acetate, rayon, lake and spirit-soluble dyes.

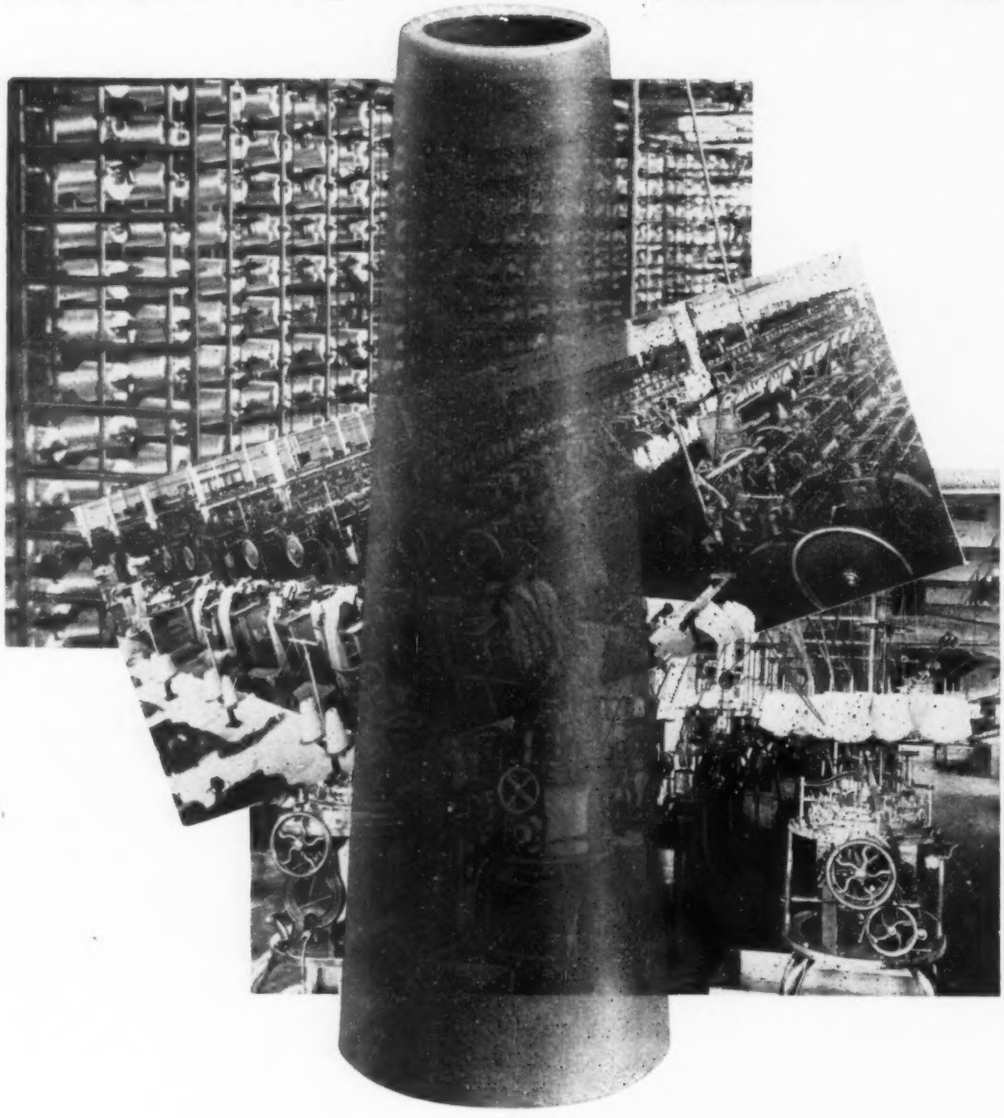
Dye imports for the same year totaled 797,348 pounds (actual weight), valued at $2,025,800—a notable decline from the 962,000 pound total of 1946. Of the 1947 imports, most of them were supplied by Switzerland, with England, France, El Salvador, Denmark, Canada and Belgium supplying the remainder.

FOR THE TEXTILE BOOKSHELF

Calco Technical Bulletin No. 799—"A Study of Fluorescent Dyes." An up-to-date report on a study of fluorescent dyes; contains pertinent data about the properties and applications of fluorescent dyes.

There are approximately eleven miles of railroad tracks at Calco

FOR EVERY JOB— THE BEST WAY!



SONOCO makes cones for every textile packaging need. Wherever indicated a SONOCO cone has been developed, improved and perfected through the years, to do a better job.

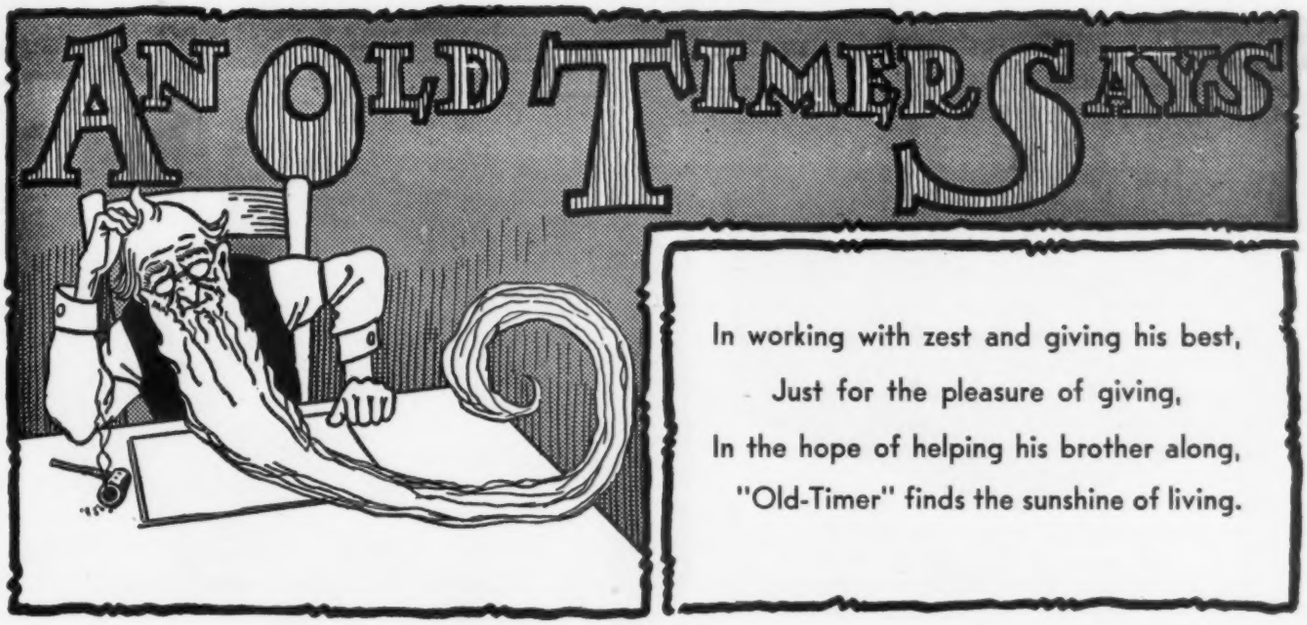
SONOCO makes cones in dozens of specifications ranging from colors to sizes, from tapers to finishes, for every known kind of yarn fibre and for every known use.

SONOCO PRODUCTS COMPANY

BRANTFORD ONT. | HARTSVILLE S. C. | MYSTIC CONN.

DEPENDABLE SOURCE OF SUPPLY

sonoco
SERVES THE WORLD
PAPER CARRIERS
REG. U.S. PAT. OFF.


AN OLD TIMER SAYS
In working with zest and giving his best,
Just for the pleasure of giving,
In the hope of helping his brother along,
"Old-Timer" finds the sunshine of living.

Old-Timer Visits Three Mills

BELIEVE IT or not, we recently visited a mill which has no superintendent and but one overseer. That foreman is the sole boss of manufacturing. The owner lives in a nearby city and seldom goes to the mill.

The First Mill. They have no heating system; they have no humidifiers; they do not even have a sweeper, but they make money for the owner.

The warps are not sized, nor are there any crossed ends or loose ends on the warps. The looms do not have shuttles. The filling is wound onto a spool or disc.

A special holder on the pick arm carries this spool or disc through the warp. This pick motion is too complicated to attempt a detailed explanation, but it works beautifully.

There is no carding or spinning in this mill—only winding, which is in the weave room where both warp and filling are prepared for the loom.

Now if we did not tell you what this mill is weaving, you would be left up in the air, wouldn't you? Well, they are weaving screens from copper wire, and that was a pretty dirty trick for OLD-TIMER to arouse your curiosity like that, we admit.

The Second Mill. Now here is one for the book. Never would we have believed operatives could do what they are doing in this mill, with the handicap they are working under. We saw box loom patterns, four and five harness dobby patterns, patterns of colored stripes, laid cords, etc.

The weavers, loom fixers and superintendent are all blind. They use hand looms with a fly shuttle; the shuttle is operated by a pick motion which the weaver pulls or jerks by hand. And, Boy! Can they jerk those pick motions fast.

The blind weaver, you of course realize, must do all of his or her work from memory and the sense of touch or feel which is highly developed by all blind people. We were standing by a blind woman weaver who was weaving a check pattern. The warp was laid with the warp pattern, but the weaver had to change color of filling and count picks to make the filling pattern.

She knew when we walked up to her loom and, realizing we probably wanted to ask questions, she said, "If you care to ask questions, go right ahead. You will not interfere with my work. I can count my picks and talk to you at the same time."

Then, by George, we decided to deliberately try to throw her off by talking fast and firing one question right after the other. No dice. She was too smart for us. She worked those harnesses with her feet, jerked that pick motion, counted 16 picks to one color of filling, changed to another color of filling (by changing shuttles), put in four picks of that color, and kept up a battery of conversation with us.

She even explained how she could draw in a pattern of colors alone, but said she preferred to have a helper or "hand-in" girl, especially where patterns were at all complicated.

Note: You readers who have not seen the large plant of Churchill Weavers, Berea, Ky., should go out of your way or make a special trip to see it. This plant is operated by highly skilled operatives (not blind people like the plant we are writing about), and there is a large sign as you approach the plant, "Visitors Welcome." You will think you are entering about a 25,000 spindle mill when you see the buildings.

If you can persuade your boss to go with you, then tell him that visiting this plant gave OLD-TIMER the idea that all mills should have some hand looms and furnish yarn to any weavers who wanted to use some of their spare time. Put what cloth weavers would make on the hand looms in some store, and let the weaver have the profit. As explained in an OLD-TIMER article, all operatives need a diversion of some kind since all the unskilled work has been taken from weavers, spinners, etc.

The mill that can give its operatives something which will occupy part of their spare time and at the same time give them a chance to make some money will go a long way toward eliminating labor turnover. If you can get your boss interested, let us know. We are confident we can give you some suggestions which will give your firm the largest return per dollar invested, they have ever received.—OLD-TIMER.

STAINLESS STEEL
SMALL WARE
FOR THE DYEHOUSE
Ruggedly Built for SEVERE SERVICE

Welded, reinforced construction gives Blickman small ware extra durability to withstand hard daily use in the busy dyehouse. For sizes and specifications send for our small ware circular.

STAINLESS STEEL PAILS
Built to take a beating. Welded construction for extra strength. Round corners for easy, thorough cleaning. Made of #18 gauge stainless steel for corrosion resistance. Ears are formed under rolled rim of the pail and transmit part of the load to the rim. Capacity to 20 quarts. Write for Bulletin 7028.

STAINLESS STEEL BUCKETS
Easy to clean. For extra strength quarter inch thick reinforcing bands are welded at top and bottom. Handles of ½ inch diameter mild steel rod are welded to upper reinforcing band. Round corner bottom speeds cleaning. Built of heavy gauge stainless steel. Capacity to 100 gallons. Send for Bulletin 7029.

STAINLESS STEEL DIPPERS
Made to withstand rough handling. Hemispherical bowl of #16 gauge 18-8 stainless steel with #16 gauge stainless tapered handle-socket welded on. Capacities 1 pint to 4 quarts. Handle of 4 quart size reinforced. Send for Bulletin 7030.

"Blickman Built"

Write for further information

S. BLICKMAN, INC. 211 GREGORY AVE. WEEHAWKEN, N. J.
Manufacturers of stainless steel textile equipment, dye boxes, linings, cylinders, dry cans, rolls, hoods, tanks.

EXPERTS at WORK

BOYCE WEAVER'S KNOTTER

Fast, accurate, dependable—that's the kind of work you will always obtain with the Boyce Weaver's Knotter. This precision-built instrument ties a perfect weaver's knot and clips the ends clean and even in one smooth, fast action.

Fast, accurate, dependable—is the kind of service offered by our Maintenance and Repair Department. Here, skilled technicians inspect, adjust and repair every instrument in use. By loaning you other knotters this service is yours—on request or on a periodic schedule.

MILL DEVICES COMPANY
DIVISION OF
A. B. CARTER, INC.
GASTONIA N. C.

REPRESENTATIVES

C. E. HERRICK, 44 FRANKLIN STREET, PROVIDENCE, RHODE ISLAND
R. D. HUGHES SALES CO., 1812 SOUTH MAIN STREET, DALLAS, TEXAS
HUGH WILLIAMS & CO., 47 COLBORNE ST., TORONTO 1, CANADA

Mr. Low Clifford, the able superintendent, took us from loom to loom and explained the difference in the looms. That is, part of the looms were built for certain constructions, like we have automatic looms, box looms, dobby looms, etc. He is quite an inventor, too. Most hand looms we have seen have plain friction let-off, but Mr. Clifford has designed a let-off which is automatic. That is, it compensates for the size (diameter) of the roll of cloth as it increases and the size of the warp as it decreases. He has also invented an improved pick motion which the weavers all like very much.

It was simply marvelous to us to have this totally blind man lead us around through his weave room, introduce us to each weaver, explain the pattern the weaver was weaving, and then explain all the working parts of different makes of looms.

He showed us one pattern which was a very open weave. In fact, it had the space of about two picks between each pick of filling. Mr. Clifford explained that he had trouble in spacing these picks evenly, so he put a stop or bumper on the loom for the lay to strike; this gave him the correct spacing. The lay is operated by hand, you know.

Besides hand loom weaving, these blind people make rugs, table cloths, napkins, beautiful scarfs for both men and women, bedspreads, an extensive variety of children's knit clothes, window drapes, and numerous other products.

We were very much impressed with the appreciation these blind people expressed. They seemed to simply glow with appreciation when we made complimentary remarks about their work. And they especially enjoyed talking to someone who was familiar with weaving and textile mill operations. They asked numerous questions about power looms and automatic looms.

You see, fellows, many of these people never saw a loom—have never seen even the loom they work on.

When we told them that weavers on automatic looms weaving plain cloth operated from 60 to

Rebuilt and Improved

DRAWING FRAMES

You saw it at the Southern Textile Exposition

AMW is now making a specialty of converting old 4-roll frames into 5-roll frames, thus eliminating one process in some cases, and is building new 4- and 5-roll drawing of 4- and 6-delivery type, with evenness test showing an average variation of as low as 14%. These rebuilt and improved drawing frames will handle staple lengths up to 2", and will give you 8 ends up on all 5-roll frames, with all ball-bearing top rolls and wick-oiled bottom rolls.

We are also building and changing over old frames to run synthetic fibers up to 3" staple.

Let us show you in your own mill the advantages and savings you will receive in your drawing frame efficiency by having AMW rebuild and change your drawing frames. Write, Wire or Call today!

Atlanta Machine Works

98 Piedmont Avenue, S.E. • Atlanta, Georgia

Represented by:

John C. Turner
Box 916
Atlanta, Ga.

Textile Specialty Co.
Box 1297
Greensboro, N. C.

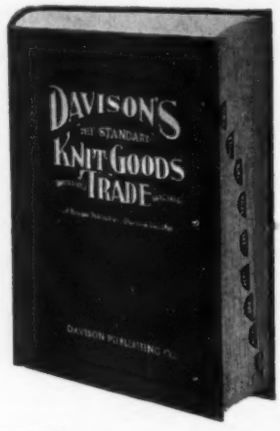
To Buy, to Sell, to Know the Mills,

Here Is the Only Annual Knit Goods Register
The New 58th Annual Edition

"An authority on knit goods for over fifty years"

Over three times an ordinary year's corrections! A Twenty Thousand Dollar Revision.

Reports and Lists The Entire Knitting Industry Complete!



OFFICE EDITION $6.50 POCKET EDITION $5.50

The only annual register of the Knitting Industry.

NEW NAMES, NEW FIRMS, NEW ADDRESSES, NEW MARKETS, AND NEW BUYING SOURCES

2939 Knitting Mill reports in detail; officers, machinery, etc.
693 Knitting Yarn Spinners' reports; equipment, sizes, etc.
762 Knitting Yarn Dealers are also listed.

NEW ENLARGED LISTS AS BELOW

534 Knit Goods Manufacturers' Agents
1688 Knit Goods Wholesalers with buyers; over 350 new firms.
965 Chain store organizations.
1902 Department Stores with Knit Goods Buyers' Names.

THE NEW 58TH ANNUAL
DAVISON'S KNIT GOODS TRADE

represents an investment of almost twenty thousand dollars by the publishers in thoroughly revising thousands of separate mill reports, classifying them by product, alphabetically indexing them and also including about twelve thousand allied firms. Arranged and edited with rigid precision, its eight hundred pages will bear the test of any examination! It is yours for only $6.50 in the deluxe office edition or $5.50 for the handy size! No increase in price.

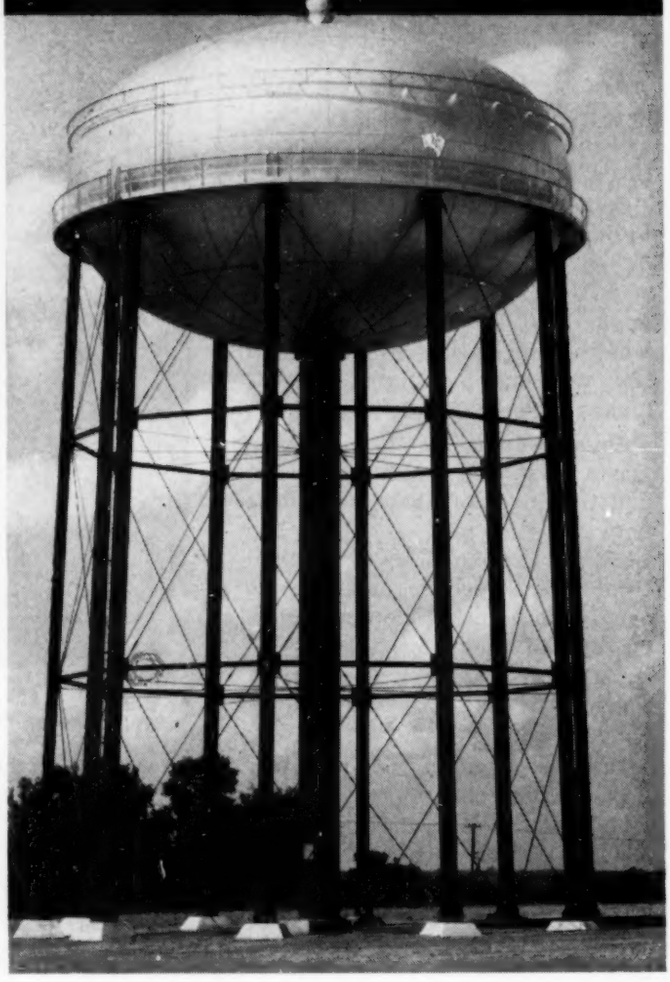
F.O.B. Ridgewood, N. J.

The Entire Industry Is Conscientiously Reported, Listed and Cross-Indexed in a quality Cloth and Gold Stamped Volume.

DAVISON PUBLISHING CO.

"Standard Textile Publications Since 1866"
Executive, Production and Sales Offices at
RIDGEWOOD, NEW JERSEY

TOPS IN TANKS

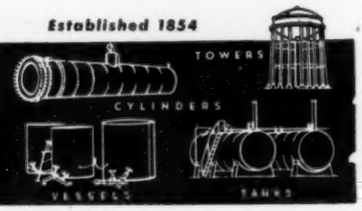


FOR nearly a century, Cole has been designing and erecting elevated tanks for the textile industry. Mill engineers know from experience that Cole tanks deliver the most dependable water service for sprinkler systems and general use, with the very lowest maintenance cost. Call on Cole for assistance with your problems.

Write for the latest Cole catalog — "TANK TALK"

R. D. COLE
MANUFACTURING CO
NEWNAN, GA.

Established 1854



100 looms, depending upon the class of goods being woven, they could hardly believe our statements. Remember, they cannot read textile magazines, and many of them do not know how to read Braille, the raised lettering which blind people read by passing the tips of their fingers over the raised lettering.

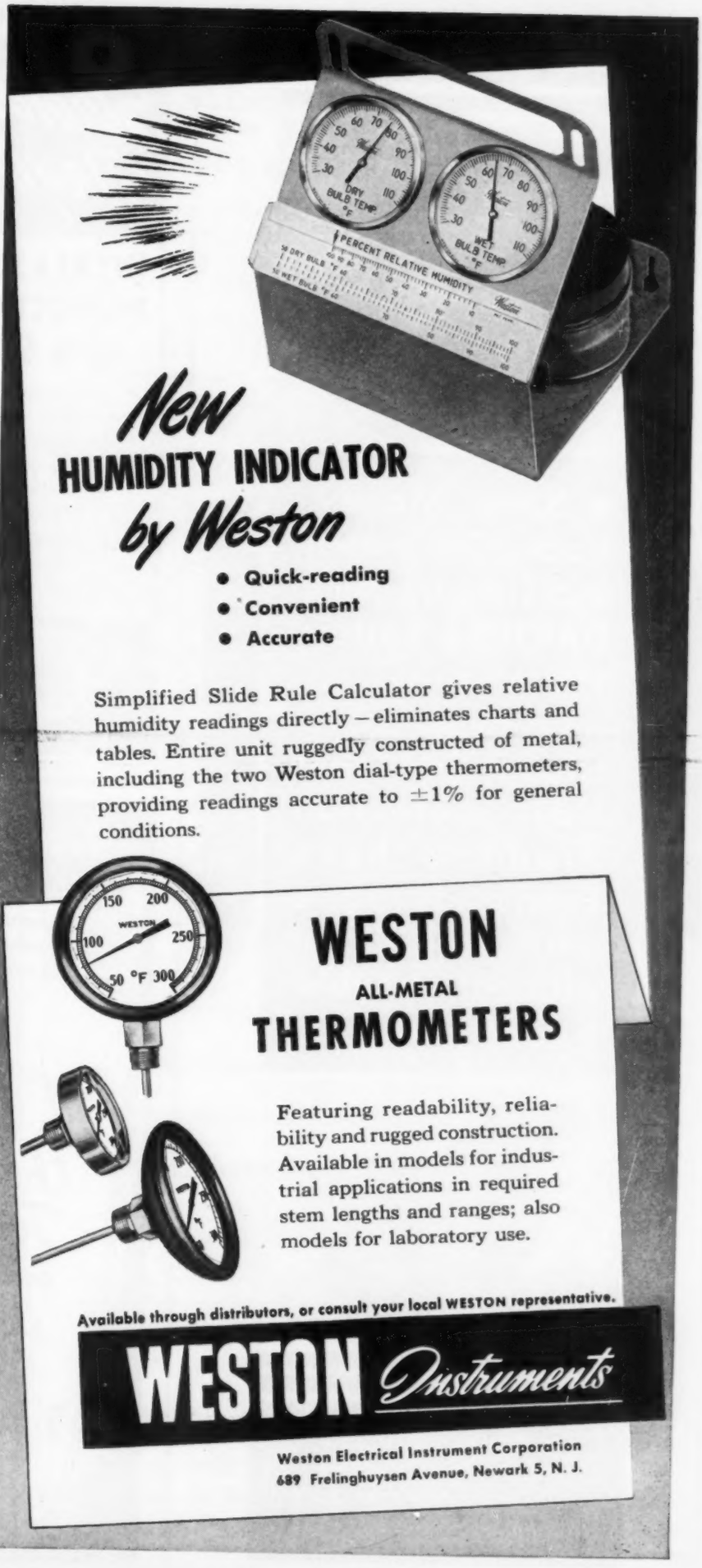
Do some of you OLD-TIMER readers want to do a good turn, which will cost you nothing but which will be greatly appreciated by these blind, but very grateful and appreciative people? OK, sit right down now as soon as you read this and write a short letter to Mr. Low Clifford and tell him you have read the article in TEXTILE INDUSTRIES which OLD-TIMER wrote telling readers about the work this blind superintendent is doing and the high efficiency of his blind weavers.

Our prediction is that he will have those letters read to every blind operative in that mill. Just address your letter to OLD-TIMER in care of the editor of TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga., and we will send them along to Mr. Clifford. We will appreciate it, fellows, and we know your letter will make a lot of blind people very happy.

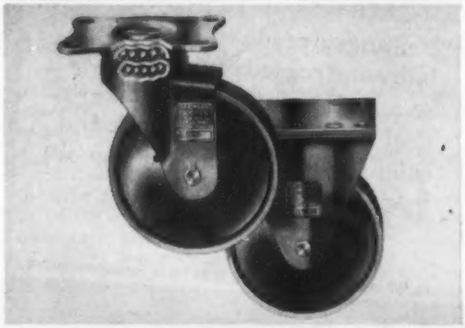
(Next month Old-Timer will take the reader through the third mill.—The Editors.)

USDA Spinning Tests on 1948 Cotton Crop

The first report on fiber and spinning results for some pure varieties grown by cotton improvement groups in early-harvesting South Texas areas this season have been issued by the U. S. Department of Agriculture. Testing officials said that there was no broad basis for comparing this year's crop with those of other years at present, but that thus far the tests indicate the current crop is average or above average.

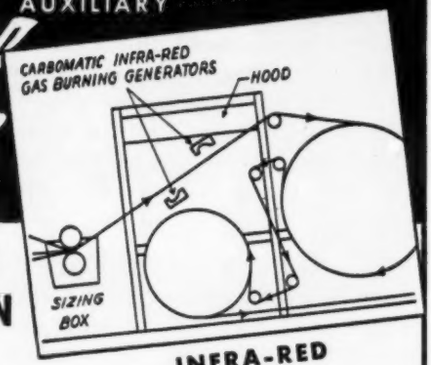

PERCENT RELATIVE HUMIDITY
DRY BULB TEMP °F
WET BULB TEMP °F
New
HUMIDITY INDICATOR
by Weston
• Quick-reading
• Convenient
• Accurate
Simplified Slide Rule Calculator gives relative humidity readings directly—eliminates charts and tables. Entire unit ruggedly constructed of metal, including the two Weston dial-type thermometers, providing readings accurate to ±1% for general conditions.
WESTON
ALL-METAL
THERMOMETERS
Featuring readability, reliability and rugged construction. Available in models for industrial applications in required stem lengths and ranges; also models for laboratory use.
Available through distributors, or consult your local WESTON representative.
WESTON Instruments
Weston Electrical Instrument Corporation
689 Frelinghuysen Avenue, Newark 5, N. J.

• Save Money, Floors, Equipment and Time by using DARNELL Casters and Wheels . . . Always dependable, these low-cost floor protection products have been made to give you a long life of efficient, trouble-free service.



DARNELL CORP. LTD.
LONG BEACH 4 CALIFORNIA
60 WALKER ST. NEW YORK 13 N Y
36 N. CLINTON CHICAGO 6 ILL.

CARBOMATIC
AUXILIARY
Slasher Dryer



INFRA-RED

INCREASES PRODUCTION up to 50%

• Improves splitting action • reduces flattening of yarn • produces a better warp • units are available to completely eliminate steam cylinders.

Write for Bulletin C-11 on remarkable new efficiencies and money-savings by use of modern Infra-Red throughout textile preheating, drying, curing, singeing and printing operations.

CARBOMATIC CORPORATION — *Pioneers in Textile Infra-Red*
24-81 47th ST., LONG ISLAND CITY 3, N. Y.
SOUTHERN BRANCH: Textile Specialty Co., Greensboro, N. C.

CARBOMATIC
INFRA-RED RADIANT HEAT
(Gas-Fired or Electric Units)

PENICK & FORD, LTD., INCORPORATED

CORN STARCHES, DEXTRINES, GUMS, CORN SUGARS & SYRUPS
NEW YORK, N. Y. • • • • CEDAR RAPIDS, IOWA
SOUTHERN OFFICES: ATLANTA, GA. • • • • SPARTANBURG, S. C.

John:
Why not let the Penick & Ford Textile Laboratory in Atlanta check specifications on that cloth?
Jim

SUPPLIERS' NEWS

WHAT THEY ARE DOING

The Goodyear Tire & Rubber Company, Akron, Ohio, celebrated its fiftieth anniversary with a three-day program which began October 6. Participating in the program were 1700 key executives, coming from all parts of the United States and foreign countries.

The Carborundum Co., Niagara Falls, N. Y., has made the following personnel changes: E. B. Forse, present manager of the Refractories division at Perth Amboy, N. J., has been appointed assistant vice-president; and C. E. Hawke, present director of sales, is now manager of the Refractories division.

George M. Porges, of George M. Porges Associates, New York, N. Y., has been named metropolitan and southern sales representative for **Lee Dye Works, Inc.,** Philadelphia, Pa.

The Bahnson Company, Winston-Salem, N. C., has launched a new program in the field of customer

The plaque pictured above was given to Charles Bond of Charles Bond Co., Philadelphia, Pa., honoring his 60th anniversary as founder and president, and dedicated by his associates in tribute to their admiration for Mr. Bond.

Series 3 of Typical "H-W" CONDITIONER Applications

PEPPERELL *Manufacturing Co. REPORTS*

advantages of the *"H-W" CONDITIONER

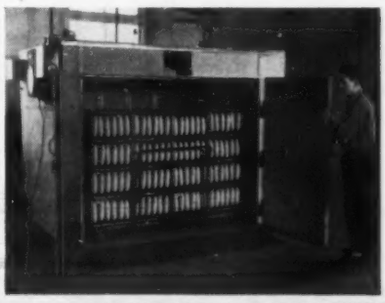
The satisfactory results obtained by use of the "H-W" CONDITIONER in the Biddeford, Maine, mill of Pepperell Manufacturing Company is evidenced by the following report from Mr. Lyman H. Smith, General Manager:

"We find in blends of rayon and rayon and wool that we can satisfactorily set the twist on 18's and 20's yarn with 26 T.P.I. in 45 minutes and, on lower twist numbers such as a 24's yarn with 18 T.P.I., a half an hour is sufficient.

"We have practically no trouble with bleeding of tints, a trouble that is always present when tinted yarn is steamed.

"The machine has satisfactorily set the twist on crepe type yarns.

"We have had no maintenance problems with the machine since its installation."



View of "H-W" CONDITIONER installed in the mill of Pepperell Manufacturing Co., Biddeford, Maine.

Full particulars in Bulletin UC-3 . . . yours for the asking.

*Trade-Mark Reg.

The Industrial Dryer Corporation
STAMFORD, CONN.

TON TEX
Reg. U.S. Pat. Off.

GENUINE TON-TEX

LOOM HARNESS STRAPPING

Operates Better — Lasts Longer

Genuine Ton-Tex is made of plies of fine quality cotton fabric welded together. Balanced construction. Strong, flexible, absorbs shock easily. Operates at low maintenance cost.

For the Best in Strapping — Specify Ton-Tex.

TON-TEX CORPORATION

16 WEST 61ST ST., NEW YORK 23, N. Y.

GREENSBORO, N. C.
217 JEFFERSON BLDG.

BOSTON 10, MASS.
122 PEARL ST.

RODA — High grade gas, by-product and steam coal from Wise County, Va., on the Interstate Railroad.

DENDRON — High grade gas, by-product, steam and domestic coal from Wise County, Va., on the Interstate Railroad.

STONEGA — High grade, high volatile steam and by-product coal from Wise County, Va., on the Interstate Railroad.

PREMIX STOKER — A laboratory controlled product blended to meet exacting stoker requirements. From Wise County, Va., on the Interstate Railroad.

GLENBROOK — The Premium Kentucky Splint unmatched for domestic use—now under development in Harlan County on the L. & N. Railroad.

COKE — Roda and Stonega from Wise County, Va.

CRITERION COAL — High grade gas, by-product, steam and domestic coal—Pittsburgh seam from Irwin Basin, Westmoreland County, Pennsylvania, on the Penna. Railroad.

CROZER — Genuine Pocahontas from McDowell County, W. Va., on the Norfolk & Western Railroad.

LYNCO — High fusion coking coal for by-product, industrial stoker and pulverizer use from Wyoming Co., W. Va., on the Vgn. Ry.

Old Kentucky — Hazard No. 4 and No. 7 steam and domestic coal from Wiscoal, Knott County, Kentucky, on the L. & N. Railroad.

ANTHRACITE — Hazle Brook and Raven Run Premium Coal.

Our personnel with the experience gained through long and varied marketing activity assures effective servicing of any fuel requirement.

General Coal Company

123 SOUTH BROAD STREET — PHILADELPHIA 9, PA.

Branches:

BLUEFIELD, W. VA. — BOSTON — NEW YORK — BUFFALO — NORFOLK — CHARLOTTE, N. C. — PITTSBURGH — CINCINNATI

Are you competitive price wise?

Are you ready for a buyer's market?

Are you satisfied with your quality?

As Production Engineers we specialize in the utilization of

LABOR — EQUIPMENT — MATERIAL

Ask for our list of satisfied clients—It reads like the Blue Book of American Manufacture.

Our work covers millions of spindles and years of experience.

AMERICAN ASSOCIATED CONSULTANTS, Inc.

D. S. KEOGH, President
J. J. SKELLY, Vice Pres. and Gen. Mgr.

250 PARK AVENUE
NEW YORK 17, N. Y.

GRANT BUILDING
PITTSBURGH, PA.

H. B. CRAFT, Vice President
in Charge of Southern Operations

30 CAMDEN ROAD
ATLANTA, GA.

relations that includes a two-week course for operating and maintenance engineers so that they might have the opportunity to learn about the equipment they are operating.

A major expansion program of manufacturing facilities has been completed by the Amplex division of **The Chrysler Corporation,** Detroit, Mich. New Equipment has been installed to provide improved service on Oilite heavy duty oil cushion bearings and finished machine parts.

Mr. Rollins

John D. Rollins, formerly associated with Borden, Burlington and Dan River Mills, has been appointed sales engineer for the **American Monorail Co.,** at their Charlotte, N. C., office.

C. Douglas Mercer, president and director, **Willcox & Gibbs Sewing Machine Co.,** sailed recently for an extended business trip to Great Britain and the Continent. He contemplates visiting company officials and also branch offices in the foreign area.

The Lowell (Mass.) Textile Institute has appointed six instructors to the faculty. They are: Dr. Ronald E. Glegg, formerly with the University of New Brunswick, is assistant professor of organic chemistry; Martin J. Lydon, recently returned from leave of absence, will instruct in the social sciences department; Stuart L. Mandell will also instruct social sciences; Robert C. Gray, an instructor in woolen and worsted design; Philip A. Hallis in the engineering department as an instructor in physics; and Adolph Katz will instruct mechanical engineering.

Peerless Pump division of the **Food Machinery Corp.** has announced the completion and relocation of personnel and equipment to

check these lists of
Textile Machinery *then*

CONTACT COMER

Opening equipment
Single process pickers
Cards
Drawing
Long Draft Slubbers
Abbott Winding
Wide Gauge Twisters

Combers
Spinning
High Speed Warping
Slashers
Looms
Finishing Equipment

Comer connections reach into every great Textile Center. To buy or to sell Textile Machinery—it's sure . . . it's quick . . . it's profitable . . . to CONTACT COMER!

Call, Write or Cable Comer Today

"SALES AROUND THE WORLD"

COMER MACHINERY COMPANY

Cable Address: COMACH

308 Ivy Street, N. E. — Atlanta, Georgia, U.S.A.

EXPERIENCED TRAVELERS

Dary Ring Travelers are old hands at making that familiar trip around the spinning ring. Their extra-fine quality has made their on-the-job performance really outstanding—even under the most difficult conditions. Dary Ring Travelers last longer—run weeks at a time without change; and they permit the use of higher spindle speeds.

Dary Ring Travelers are manufactured by the exclusive Dary Process to give you *better* service. You are assured of the finest workmanship and guaranteed weight, temper and stock.

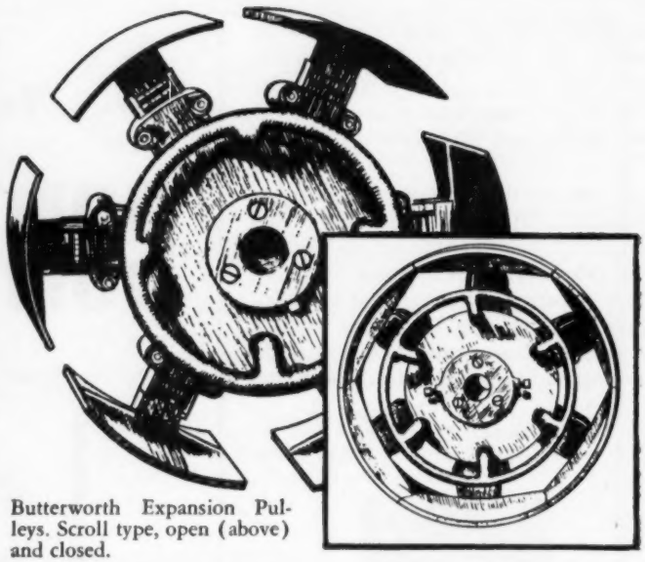
Yes, Dary Ring Travelers are known for their experienced, efficient trips around the spinning ring. Why not let this Dary experience work for you? Your friendly Dary representative will be glad to give you further details.

THE DARY RING TRAVELER CO.

TAUNTON, MASSACHUSETTS

PROCESSED
SYMBOL OF SUPERIORITY

JOHN E. HUMPHRIES, BOX 843, GREENVILLE, S. C.
JOHN H. O'NEILL, BOX 720, ATLANTA, GA.
H. REID LOCKMAN, BOX 515, SPARTANBURG, S. C.
JAMES H. CARVER, R. F. D. 2, SHELBY, N. C.



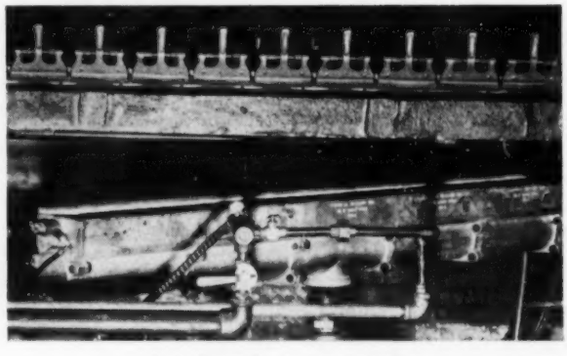
Butterworth Expansion Pulleys. Scroll type, open (above) and closed.

IMMEDIATE DELIVERY. Butterworth Scroll-type Expansion Pulleys are now in stock in following diameters: 14¾"x18½"; 17"x22"; 18¼"x 23½"; 24"x30". All have 6-inch face which can be cut down if necessary. All are bored for smallest diameter and can be rebored and splined as required.

H. W. BUTTERWORTH & SONS COMPANY
Serving the Textile Industry Since 1820
Main Office and Works: Philadelphia 25, Pa.

Butterworth

THE 'INFRED'
GAS OR ELECTRIC RADIANT HEAT



Section of Tenter Frame Dryer

- TENTER FRAMES
- STEAM CANS
- CURING BOXES
- SINGERS
- SLASHERS
- DRY BOXES

Infra-Red speeds up production!
Let us show you how these systems
SAVE TIME AND MONEY.

PROCESS HEATING, INC.

Industrial Heating Engineers
346 Warren Street, Brooklyn 2, N. Y.

The EMBLEM OF QUALITY METAL SHIELDS

For Spools and Bobbins

Anderson Shields are dependable protection against chipping, splitting, and breaking of spools, bobbins, and paper caps. Even the most minute details are carefully worked out to make Anderson the highest in precision, the smoothest in finish, the best in performance. The Anderson Emblem is your assurance of the finest shields you can buy.

Insist on Anderson when you order metal shields.

TEXTILE SHIELD CO., INC.

J. N. ANDERSON, Treasurer

LAWRENCE, MASS., U. S. A.

the new plant at Indianapolis, Ind.

Clinton (Iowa) Industries, Inc., has made the following changes in the sales operations: H. A. Bendixen, former manager, has taken the duties of the newly created post of bulk starch sales manager and other primary products; A. C. Junge, former assistant manager bulk starch sales, has become manager of bulk starch and laundry starch sales; Ray E. Mikkelsen, former assistant manager of the sales service department, is now assistant manager of bulk starch and laundry sales.

Mr. Howell

Ralph E. Howell, formerly associated with Frank G. North, Inc., has been appointed manager of the **Norcross Corporation's** new southern sales and service office in Charlotte, N. C.

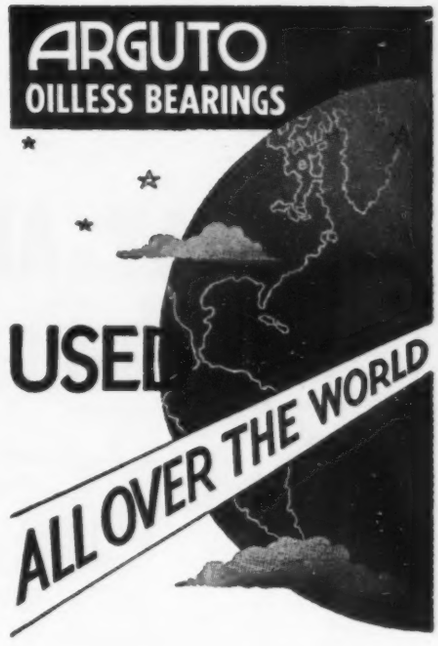
The **M. W. Kellogg Co.,** New York, N. Y., has announced that the installation of the new automatic mass production assembly line for volume output of the new Kellogg loom is now underway.

Harry W. Bagley, former woolen designer and mill superintendent, has joined the **U. S. Bobbin & Shuttle Co.,** Lawrence, Mass., as sales representative in the Pennsylvania, New York and New Jersey territory.

Construction of a building and relocation for the Houston, Tex., branch of **The Foxboro (Mass.) Co.,** has been completed, and will provide sales and servicing facilities and space for warehousing and parking accommodations.

Crosby M. Kelly, formerly associated with the Ford Motor Co., Dearborn, Mich., has become director of advertising and sales promotion for the **Rapids-Standard Co., Inc.,** Grand Rapids, Mich.

ARGUTO OILLESS BEARINGS



..IN MANY DIFFERENT

APPLICATIONS

"OUTWEARS THE BEST BRONZE METAL"

20 years without a drink—

ARGUTO OILLESS BEARING CO.

WAYNE JUNCTION PHILADELPHIA

A NEW

SPRAY-APPLICATION TECHNIQUE

for

TEXTILE PROCESS COMPOUNDS

MINOTINTS

Oil-base fugitive tints for all synthetic and natural fibers.
Identification — Lubrication — Conditioning

RAYON OILS	SS BASE OIL
TINTINOLS	MINEROL
LYNOL	MEON

BRETON OILS FOR WOOL

Accurate trouble-free application of spraying oils and tints by the new pressure method which eliminates pumps and moving parts. Simplification is progress and ours is backed by 74 years' experience.

INQUIRIES INVITED

BORNE SCRYMSER COMPANY

Offices and Works — **Established 1874** — **Southern Warehouse**
ELIZABETH, N. J. — **CHARLOTTE, N. C.**

WHEN will you be needing new rings?

If you'll need to install new rings any time during 1949, you've probably already got it marked on your maintenance calendar. How about letting us get it marked down on the DIAMOND FINISH production calendar — right NOW? Order now, have 'em when you need 'em.

WHITINSVILLE (MASS.) SPINNING RING CO.

Makers of Spinning and Twister Rings since 1873

DIAMOND FINISH

Make it *easy* for your workers to move materials—and you take a big step toward lower handling costs. That's one of the reasons why it pays to use boxes, cans and other receptacles made from *Diamond Fibre.* This durable material weighs only ½ as much as aluminum—yet is plenty strong for long, hard use! It will not readily crack, splinter, or shatter. Its smooth, tough finish makes it safe for handling anything from fine fabrics—to steel products. For faster, *easier* materials handling, write for Catalog HW-46, today.

C-D DIAMOND FIBRE RECEPTACLES
CONTINENTAL-DIAMOND FIBRE CO., NEWARK, DEL.

QUALITY RICHMOND PRODUCTS

NO. 8 OF A SERIES

ONE HOSIERY DYEING HEADACHE ELIMINATED WITH

DYNYL

Something *Really* NEW!

FOR BETTER UNIONS AND MORE LEVEL DYEING of 15-denier monofil nylon with multi-filament welts and feet.

DYNYL A

For Acetate Colors—Better Unions

DYNYL W

For Ny Dyes and Acid Colors

Less Throw-Outs Due to Uneven Dyeing
Easy to Use
Very Good Results
Also very effective for Spun Nylon and Nylon Knitted Fabrics.

DIRECTIONS FOR DYEING 15-DENIER HOSIERY

All Percentages Based on the Weight of the Goods:

DYNYL A

Scour first as usual.
Make a fresh bath.
Add 5% of DYNYL
1% of Modinol
Dye at 150 to 160 degrees as usual.

DYNYL W

Scour as usual.
Give two thorough rinses.
Add 5% of DYNYL W
Dye as usual.

Samples and Detailed Information Upon Request

Southern Office
617 Johnston Bldg., Charlotte, N. C.
Charlotte 2-1428

RICHMOND OIL, SOAP & CHEMICAL CO., Inc.
1041-43 FRANKFORD AVE.
PHILADELPHIA 25, PA.

PERSONAL NOTES

ABOUT MEN YOU KNOW

A. Anthony Dreyspool, former head of the export department at Spring Mills, has been appointed head of sales to the manufacturing trades for Wamsutta Mills, New Bedford, Mass. **Kenneth B. Cook,** former general production manager of Crown Mfg. Co., Providence, R. I., has been made general manager to supervise all Wamsutta production operations.

Bert G. Gross, former vice-president of Applikon, Inc., Paterson, N. J., has been named president of Kingly Fabrics, Inc., New York, N. Y.

Raymond K. Briden, formerly with Lorraine Mfg. Co., Deering-Milliken and J. W. Valentine Co., has joined the fabric development and designing staff of the New York office of Dan River Mills.

Richard O. Steele, Charlotte, N. C., has been selected as the recipient of a research fellowship established by Avondale Mills. The Textile Research Institute decided to grant Mr. Steele a post-doctoral fellowship for further research on cellulose in their laboratory, because of his previous research on cellulose.

F. B. Galligan, former general manager of Firestone Textiles, Bennettsville, S. C., has been transferred to Firestone Textiles, Inc., Gastonia, N. C., as production superintendent. **E. F. Sweeney,** former general manager of Firestone Textiles Limited, Woodstock, Ontario, Canada, replaces Mr. Galligan at Bennettsville.

John A. Howard has announced his resignation after more than 38 years' association with J. P. Stevens & Co., Inc., having been connected with Republic Cottons Mills, Great Falls, S. C., in an assistant secretarial capacity. **George M. Wright, Jr.,** former superintendent of plant No. 1 of Republic, has accepted the assistant superintendency of Gaffney (S. C.) Mfg. Co.

Ernest Pfeiffer, formerly associated with Yale Fabrics Corp., has replaced **George Groh,** recently re-

Supplied and Serviced by
STODGHILL and COMPANY
ATLANTA GEORGIA

"The Size That Satisfies"
SUPERTAL

LUREX*

The NEW MIRACLE METALLIC YARN

- **ABSOLUTELY NON-TARNISHABLE**—retains brilliance forever when instructions are properly followed.
- **ODORLESS**—no unpleasant metal or tarnish odors can occur.
- **EASY TO LAUNDER AND DRYCLEAN**—by the same methods used for rayon.
- **SOFT AND PLIABLE**—in finished fabric Lurex has good hand,—is not harsh or abrasive.
- **LIGHT IN WEIGHT**—provides metal luxury look without customary weight.

Fabrics containing these glamorous gold, silver and copper yarns can be used and sold with confidence because Lurex overcomes all of the limitations that have restricted the use of metal in present day *wide loom* fabrics.

Designers can now add to their color palettes the ageless rich tones of metal to create appealing and practical fabrics.

Lurex is available to qualified mills by itself and in a wide variety of core yarns and twists. It can be woven or knitted with all natural and synthetic fibres.

INSTRUCTION TAGS

To assure customers that your fabrics contain non-tarnishable and launderable Lurex metallic yarn, suitable identification and instruction tags are available to you for use by your end product customers.

*Reg. U. S. Pat. Off.

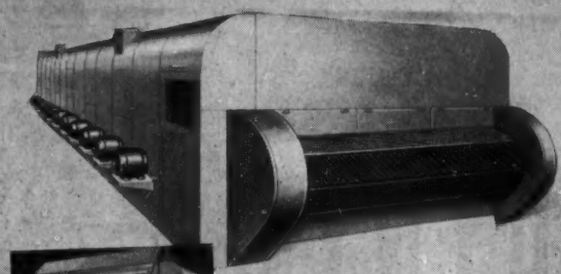
LUREX

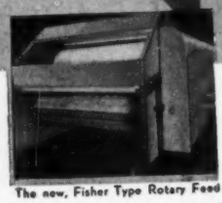
The Miracle Metallic Yarn That Never Tarnishes

For further information write
The Dobeckmun Company, Yarn Division, Cleveland 1, Ohio.
New York Office and Show Room 250 West 57th Street.

SARGENT'S STOCK DRYER

MODERN—AUTOMATIC





The new, Fisher Type Rotary Feed which has replaced the conventional spiked Apron Type Feeder

for Drying Wool, Cotton, Rayon, Other Synthetic Fibres, Rags

The Sargent Automatic Stock Dryer meets all modern requirements of textile mills for fast, trouble-free production, at minimum cost.

Its high-velocity, pressure-type fans are directly connected to standard frame, ball-bearing motors. The machine is vibration-free. Stock is carried on the Conveyor of heavy-gauge steel sectional flights which are built to specifications for the type of work required. The Conveyor presents a constantly smooth surface, traveling on a variable-speed, covered chain drive. Some of its other features include: highly efficient heating coils; low steam consumption; heavily insulated removable hinged panels for easy inspection of work in travel; thermostatic controls; ease of cleaning; a minimum of maintenance cost.

The machine's streamlined design affording a maximum area of drying surface, requires unusually small floor space for the volume of its high production.

Please write us for complete details.

C. G. SARGENT'S SONS CORPORATION

GRANITEVILLE, MASSACHUSETTS, U. S. A.

An Up-to-Date

PRINTING PLANT

- Equipped with modern machinery and a staff of competent workmen, solicits thru this publication, a trial order on your printing needs.
- We have built a reputation that is known over the entire South by our special attention to the minutest detail.
- We are more than ready to answer any question that relates to your printing problems.

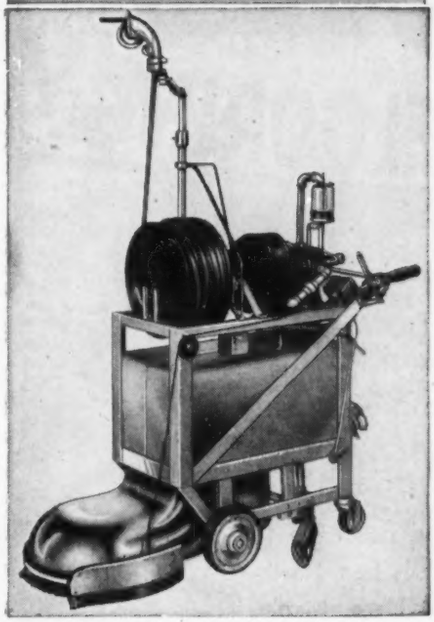
Write us and let us quote you on anything from a postal card to a fully bound book

L. A. Lee Company, Inc.

DALTON, GEORGIA

Printers and Publishers

SCRUBS and SQUEEGEES
FLOORS



LAWLOR 20-D

DOES BOTH JOBS

Only one operator is required to run this remarkable two-in-one machine. Clean water is fed from one tank upon the soaped floor, the 19" diameter revolving brush scrubs it quickly and thoroughly. Then a rubber squeegee mops up the dirty water which is vacuum pumped into a second tank.

JUST THE THING FOR LARGE AREAS

The Lawlor 20-D is only 22" wide and can be used in congested places around machines, counters and desks. Available for either AC or DC current.

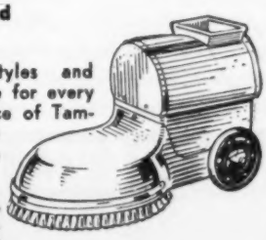
MOP WRINGERS

All steel with perforated rolls. Easy foot-lever operation. Made for one or two pails.

MOPPING TANKS

Heavy galvanized steel with welded seams. Two compartments, each with shut-off. Foot pressure wringers. 30 or 60-gallon capacity.

SCRUBBERS and POLISHERS



12 different styles and sizes, a right size for every need. Your choice of Tampico, Palmetto or Steel Wire brushes.

Lawlor Equipment is sold and serviced by local Janitor Supply Houses.

Write for Catalog giving description on the complete line

S. C. LAWLOR CO.
Makers of Quality Equipment for 50 Years
121 N. Aberdeen St., Chicago 7, Ill.

signed, as head of the fabric development department of Colonial Mills, Inc., New York, N. Y.

Walter A. Qualman, Jr., formerly associated with Moniteau Mills, Inc., California, Mo., has been appointed superintendent of Portland (Ore.) Woolen Mills.

Edward T. Taylor, former purchasing agent of the North Carolina Finishing Co., has been promoted to secretary and assistant treasurer. He succeeds the late **E. J. Gallagher.**

Alvin S. Davis, former president of Callaway Educational Association, LaGrange, Ga., has been appointed director of industrial relations for Callaway Mills Co. He has also been named chairman of the board of Callaway Educational Association.

William J. Cleveland, former assistant general superintendent of manufacturing for Textiles, Incorporated, has been named superintendent of the company's Victory and Winget plants, Gastonia, N. C. He replaces **H. G. Winget** who has requested relief from active duties because of ill health.

Wiley A. Reeves, formerly of Callaway Mills and Lavonia Mfg. Co., has become overseer of carding at Crystal Springs Bleachery, Chickamauga, Ga.

Osborne A. Simmons, for the past 20 years with Suncook (N. H.) Mills in various capacities, including director of quality control, has become plant manager of the newly established mill of Flightex Fabrics, Inc., Westerly, R. I.

Edward Colle, former weaving foreman at the Wedgewood Mills, Paterson, N. J., is now foreman of weaving of the recently organized Paris Fabric Mills, Inc., in Paterson.

Walter Jackson, former superintendent of Sutton's Mill, North Andover, Mass., is now superintendent of the Rocky Gorge Woolen Mill, South Berwick, Me.

Richard Lardner, who has been with Forstman Woolen Co., Passaic, N. J., since 1933, has been elected a vice-president.

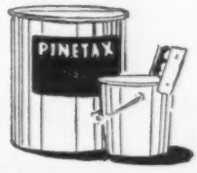
Howard Wilcox, former overseer of carding at Hartford, Vt., has joined Draper Brothers, Canton, Mass., in a similar capacity.

Clarence S. Pennington has been

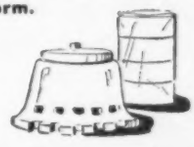
* pretty to look at

but they don't
MAKE FRIENDS

*** Your premises may be modern . . . beautiful . . . and the last word in appearance, but if offensive odors come into the picture they just don't make friends for you. There's no excuse to let P. O. (Premise Odor) stifle your business . . . your relationship with people . . . not when P. O. is so simple to control with the proper Selig disinfectant or deodorant.**



With PINETAX, offensive odors that arise from unsanitary conditions are overcome at their source by eliminating their cause . . . other odors are relieved and staleness overcome by the fresh pine odor when Pinetax is used in mopping water . . . also may be used as a deodorizing spray in diluted form.



Only Selig offers you the patented features to be found in the URANETTE method of deodorizing your toilet rooms. The Uranette deodorant holder prevents clogging of drains, has no metal parts to corrode or rust and is pilfer-proof . . . protecting against the removal of Uranette blocks until their deodorizing vapors are completely used.

Ask for a Selig maintenance specialist to help you plan your sanitation program . . . there's a Selig product designed for better sanitation wherever it may be.

The SELIG COMPANY
Manufacturing Chemist since 1896
GENERAL OFFICES and FACTORY
ATLANTA • GEORGIA

OFFICES & WAREHOUSES • NEW ORLEANS • DALLAS

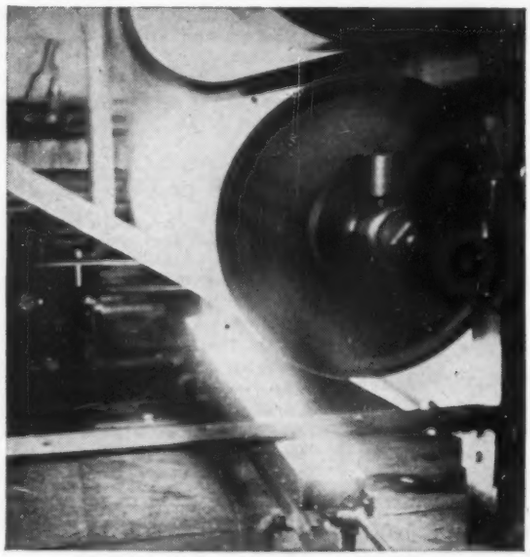
10,500,000 FEET OF *HOLT* MAPLE FLOORING!

REPRESENTED
in the South-East
by Bright-Brooks
Lumber Company
Charlotte, N. C.

Have gone into southern textile mills since 1920—with complete satisfaction to the mill operators.

When you think of floors, remember to specify Holt Flooring, made from Northern Wisconsin-Michigan Hard Maple.

HOLT HARDWOOD COMPANY., OCONTO, WISCONSIN



RED-RAY BURNERS

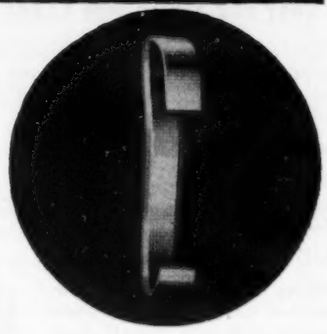
Red-Ray Radiant Gas Burners operating under steam dryers. Greater drying speeds. No additional space required.

WRITE FOR BULLETINS

RED-RAY MANUFACTURING CO., INC.
455 WEST 45TH STREET NEW YORK 19, N. Y.

U. S. RING TRAVELERS

Longer Traveler Life on



WET TWISTING
U. S. "SPECIAL BRONZE"

U. S. "Special Bronze" Twisters are something truly different and better for wet twisting. This alloy is tougher, more resistant to the peculiar conditions of wet friction—and often GIVE 20 to 35% GREATER LIFE than the ordinary bronze travelers of just a few years ago. Use these MODERN travelers for MAXIMUM service.

Working Samples Gladly Sent

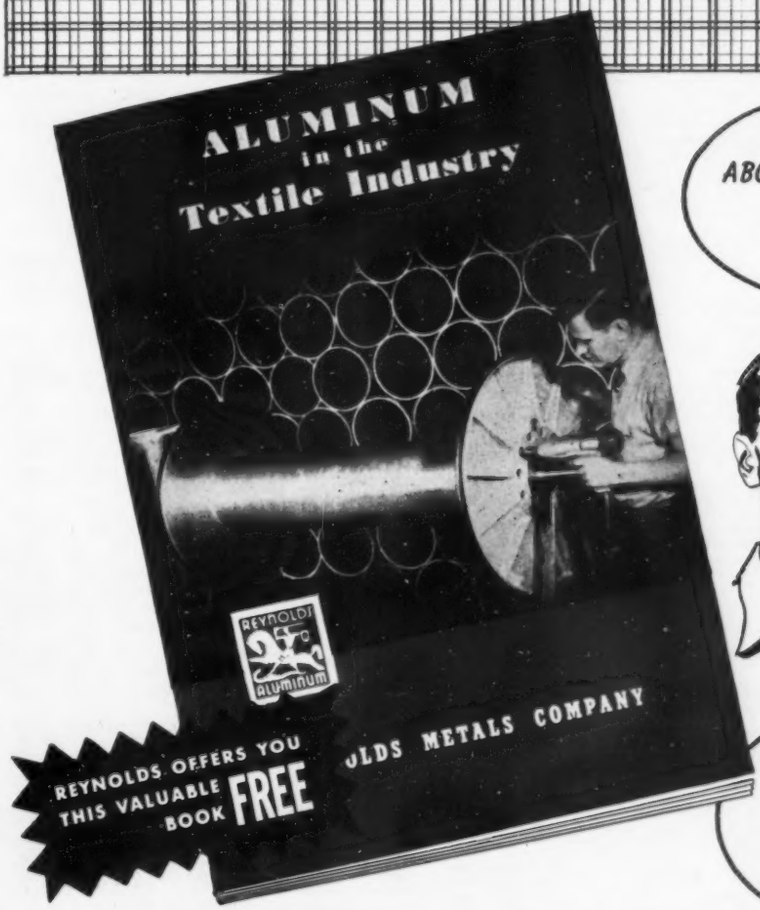
U. S. RING TRAVELER CO.
AMOS M. BOWEN, President & Treasurer
HOME OFFICE & FACTORY: PROVIDENCE, R. I.
SOUTHERN OFFICE & WAREHOUSE: GREENVILLE, S. C.

Write, wire or phone nearest office.

W. P. VAUGHAN, W. H. ROSE—Greenville, S. C.—Box 1048—Phone 3031
O. S. LAND—Athens, Ga.—Box 1187—Phone 478
L. H. MELLOR, JR.—Mid-Atlantic States—123 Treaty Rd.—Drexel Hill, Pa.—Phone Hilltop 2946
H. R. FISHER—Concord, N. C.—Box 83—Phone 8366
C. W. SMITH, H. J. SMITH—Providence—Box 1187—Gaspee 0100

Read "ALUMINUM IN THE TEXTILE INDUSTRY"

Learn HOW NEW USES OF ALUMINUM CAN SOLVE YOUR PROBLEMS AND PRODUCE GREATER PROFITS.



REYNOLDS OFFERS YOU THIS VALUABLE BOOK FREE

ULDS METALS COMPANY

TELLS ALL ABOUT MECHANICAL AND PHYSICAL PROPERTIES.
MANY NEW PRACTICAL ADVANTAGES YOU CAN USE RIGHT NOW.
WELL ILLUSTRATED... SOUND AND AUTHORITATIVE. EVERYONE IN THE TEXTILE FIELD SHOULD HAVE A COPY.

PACKED with information, clearly written, this new book from Reynolds Metals Company tells how aluminum can work for you for more profitable production. There are numerous examples and illustrations of aluminum uses already at work . . . bringing new savings to the textile industry. Based on recently compiled technical data, you'll find "ALUMINUM IN THE TEXTILE INDUSTRY" interesting and informative.

You can have this book free by sending your request at once. We want its vital facts to reach everyone quickly. To insure receiving your copy, send your request now.

REYNOLDS METALS COMPANY
Industrial Machinery Division
310-B Hanna Building, Cleveland 15, Ohio

Gentlemen:
Please send my free copy of your new book, "Aluminum in the Textile Industry."

Name_____
Company_____ Title_____
Address_____
City_____ Zone____ State_____

IF YOU SEE RUST YOU KNOW IT'S NOT ALUMINUM

REYNOLDS METALS

REYNOLDS *Lifetime* ALUMINUM

REYNOLDS PIONEERING MADE ALUMINUM COMPETITIVE . . . TAKE ADVANTAGE OF IT!

HELPFUL BOOKLETS FREE

Here is the "cream of the crop" of literature on textile subjects as prepared by TEXTILE INDUSTRIES advertisers to aid in mill operation and management. These reference books and catalogs are free for the asking and there is no obligation involved. Read through the list carefully for booklet on the subject or equipment in which you are interested. Then fill in the numbers of those desired on the coupon on page 266-D and mail it to TEXTILE INDUSTRIES.

This service is restricted to those engaged in operation and management of textile industries

GENERAL ECONOMIC, MANAGEMENT . . .

4. HOW FACTORING CAN INCREASE PROFITS—Describes how factoring works out in keeping clients' capital liquid and attitude of factor toward checking credits, including typical balance sheet.—COMMERCIAL FACTORS CORP., New York City.

5. FACTORING AND FINANCING — Illustrated booklet on how factoring works, cost and credit information.—TEXTILE BANKING COMPANY, New York, N. Y.

7. RAYON TELLS ITS STORY TO THE PUBLIC—Folder containing reprints of advertisements explaining some of the many roles in which rayon is serving the American public.—AMERICAN VISCOSE CORPORATION, New York 1, N. Y.

9. TESTING IN MODERN INDUSTRY — This booklet includes many useful tables, conversion factors, equivalent yarn sizes and other information helpful in textile mills. Also describes specialized testing service. Available free to mill men on request.—UNITED STATES TESTING CO., Hoboken, New Jersey.

10. "LABOR AND MANAGEMENT BENEFIT BY INDUSTRIAL ENGINEERING PRINCIPLES" — 8-page illustrated folder outlining principles of industrial engineering as they apply to textiles.—AMERICAN ASSOCIATED CONSULTANTS, INC., New York, N. Y.

11. FLETCHER JUNIOR "SUPER-SELF-BALANCING" EXTRACTOR—Illustrated folder describing this new extractor with the highly efficient self-balancing arrangement which uses steel springs instead of rubber buffers.—FLETCHER WORKS, INC., Philadelphia, Pa.

PLANT AND PLANT MAINTENANCE . . .

102. "TANK TALK"—Sixteen page booklet of illustrations showing various types of elevated steel tanks constructed and erected by manufacturers as well as stand pipes, reservoirs, storage and high pressure vessels, cylinders, along with helpful technical data. Also a list of what a few of the cotton mills, etc., said.—R. D. COLE MANUFACTURING COMPANY, Newnan, Ga.

107. FINNELL SCRUBBERS — Illustrated leaflets describing and giving specifications for the new Finnell floor scrubbing machines.—FINNELL SYSTEM, INC., Elkhart, Ind.

115. ATOMIZER HUMIDIFIERS—Recent issue of "Parks' Parables" on Turbomatic self-cleaning humidifiers, and automatic regulation. — PARKS-CRAMER CO., Fitchburg, Mass., and Charlotte, N. C.

129. BAHNSON CENTRIFUGAL HUMIDIFIER—Bulletin 327 describes this completely self-contained industrial humidifier which requires only water feed and drain and electrical connection to install.—THE BAHNSON COMPANY, Winston-Salem, N. C.

135. SAFETY COLOR CODE—How six standard colors can be used to reduce hazards, cut down accidents.—E. I. DU PONT DE NEMOURS & CO., INC., Finishes Division, C44, Wilmington, Dela.

138. MAGNESIUM IN THE TEXTILE INDUSTRY—Illustrated booklet on properties of magnesium for spinning, twisting, winding, knitting machines, looms, beams, spools, bobbins.—ALUMINUM CO. OF AMERICA, Pittsburgh, Pa.

150. RIHCO HUMIDIFIERS AND COOLING SYSTEMS—Bulletin describes new atomizers with construction lessening air consumption in humidifier systems, evaporative cooling systems. — ALDRICH MACHINE WORKS, Greenwood, S. C.

151. INDUSTRIAL BRUSHES—Illustrated Booklet of industrial brushes featuring textile usage on shears, printing machines—also flock, raising and cylinder brushes.—M. W. JENKINS' SONS, INC., Cedar Grove, N. J.

152. AIR CONDITIONING FOR THE TEXTILE INDUSTRY—40-page illustrated book covering air conditioning from humidity control to complete refrigerated conditioning with installations, charts, covering ABC's of cooling textile mills.—CARRIER CORP., Syracuse, N. Y.

159. BAHNSON HUMIDUCT SYSTEM — Bulletin 330 describes this unit system of air conditioning for humidifying, cooling, heating, ventilating, filtering, and dehumidifying in any desired combination. —THE BAHNSON CO., Winston-Salem, N. C.

160. INSTALLING MACHINERY WITHOUT LAG SCREWS OR BOLTS — Booklet describing use of UNISORB pads for anchoring all types of machinery. —THE FELTERS COMPANY, Boston, Mass.

162. MODERN METHODS OF TEXTILE FLOOR MAINTENANCE—Illustrated treatise on the history of floor cleaning in textile plants and a detailed description of new methods for reducing floor cleaning costs, as well as preserving textile mill floors.—G. H. TENNANT COMPANY, Minneapolis 11, Minn.

163. LAWLOR FLOOR MACHINES — Illustrated pamphlet containing specifications and describing All-Purpose Floor Machines.—THE SELIG COMPANY, Atlanta, Ga.

166. OAKITE PLANT MAINTENANCE DIGEST—A 16-page manual describing materials and methods for handling 54 recurring maintenance cleaning and related tasks in factories and mills.—OAKITE PRODUCTS, INC., New York 6, N. Y.

167. DU PONT COLOR CONDITIONING FOR INDUSTRY—Booklet, color used to reduce maintenance costs, increase production, curtail fatigue, improve employee morale. — E. I. DU PONT DE NEMOURS & CO. (Inc.), FINISHES DIVISION, Wilmington, Delaware.

170. WHY IT PAYS TO ANCHOR YOUR TEXTILE MACHINES WITH UNISORB — Illustrated booklet discussing control of vibration and noise and how UNISORB reduces maintenance costs.—THE FELTERS CO., Boston, Mass.

171. SULLIVAN T8-WG9—Illustrated bulletin describing the Sullivan line of heavy duty air compressors.—SULLIVAN DIVISION, JOY MFG. CO., Pittsburgh, Pa.

172. VENTILATING FANS — Bulletin 3339 gives facts on Buffalo Ventilating Fans. — BUFFALO FORGE CO., Buffalo, N. Y.

175. MOISTURE—Illustrated Folder, "The Yarn Conditioning System for the Textile Industry of Tomorrow."—KEARNY MFG. CO., INC., Kearny, N. J.

176. AUTOMATIC SELF-CLEANING ATOMIZER HUMIDIFIERS—Latest bulletin describing same.—AMERICAN MOISTENING CO., Providence, R. I.

177. DUCTLESS AIR CONDITIONING — Recent bulletin describing same.—AMERICAN MOISTENING COMPANY, Providence, R. I.

179. TOLEDO SCALES — A condensed catalogue which illustrates and describes all of the principal types of weight control equipment used in the textile industry. — TOLEDO SCALE COMPANY, Toledo, Ohio.

180. TANK MAINTENANCE — Illustrated folder describing R. E. McLean's methods of cleaning and painting water tanks and stand pipes. — R. E. McLEAN, Gastonia, N. C.

181. AIR FILTRATION AND DUST CONTROL—24 pages on atmospheric control, including engineering data.—AMERICAN AIR FILTER CO., INC., 275 Central Avenue, Louisville 8, Ky.

183. ELECTROMAGNETS — Folder No. 99 describes and illustrates fire prevention practices for opening and picking by use of high intensity electromagnets and magnetic pulleys.—DINGS MAGNETIC SEPARATOR CO., 509 E. Smith St., Milwaukee 7, Wis.

POWER TRANSMISSION, MOTORS, BELTING, LUBRICATION . . .

211. JOHNSON BRONZE CATALOGUE NO. 460—Shows over 850 sizes of cast bronze bushings, 350 sizes of UNIVERSAL Bronze Bars and over 250 Electric Motor Bearings. — JOHNSON BRONZE COMPANY, New Castle, Penna.

212. GATES TEXTILE ACCESSORIES — Showing the increased efficiency and economy to be secured through the use of Gates cone belts, evener belts, card bands and loom binder cushions —THE GATES RUBBER COMPANY, Denver, Colo.

216. LEATHER BOOKLET NO. 202 — Attractive book illustrating and describing BONDARON Special Tanned Leather as used in various forms such as Check Straps, Solid Round Leather Belting, Flat Belting.—CHAS. BOND CO., Philadelphia, Pa.

218. BALL BEARINGS ON TEXTILE MACHINERY—Catalog 9 gives advantages of ball bearings, describes types, illustrates each type of textile machinery.—THE FAFNIR BEARING CO., New Britain, Connecticut.

230. ALLSPEED DRIVES — This 6-page folder covers features, advantages, available size of variable speed drives for the textile industry. Also listed are horsepower and torque data, and unit dimensions.—WORTHINGTON PUMP & MACHINERY CORPORATION, Harrison, N. J.

231. V-BELT ENGINEERING DATA BOOK—Over 50 pages of pertinent engineering information including data on selecting a V-belt drive design of special V-belt drives, numerous standard tables, charts and belt and sheaves list prices. — MANHATTAN RUBBER MANUFACTURING DIV. of Raybestos-Manhattan, Inc., Passaic, N. J.

235. JOHNSON LEDALOYL BEARING BRONZE—Illustrated booklet telling the complete story of Johnson Ledaloyl Bronze, the newest development in self-lubricated bronze for textile bearings and bushings.—JOHNSON BRONZE COMPANY, New Castle, Pennsylvania.

236. LEATHER BELTING CALCULATOR—Handy and attractive calculator for determining belt, speeds, horsepower per inch of belt widths, etc., will be sent free on request.—J. E. RHOADS & SONS, Philadelphia, Pa.

244. TEXACO SPINDURA OILS—Folder on lubrication for all types of spindles, based on actual tests.—TEXAS CO., New York City.

246. CUTTING OPERATING COSTS—Nationwide Illustrated Survey showing how American textile mills cut operating costs with Multiple V-Belt Drives.—GATES RUBBER CO., Denver, Colorado.

251. OILITE BEARINGS AND PARTS—Catalog B-44 describes and illustrates Oilite bearings and parts for all industries. — AMPLEX DIVISION, Chrysler Corporation, Detroit 31, Mich.

263. NEEDLE ROLLER BEARING—Catalog Engineering and Application Data Edition 32 contains full data on selection of proper Needle Roller Bearings and outlines uses of such in various commodities including textile uses, types, installations, lubrication, etc. — TORRINGTON COMPANY, Torrington, Conn.

264. NEW DEPARTURE SHOP MANUAL—Illustrated catalog showing ball bearing mounting and maintenance practice. Covers storage, cleaning, lubrication, types of bearings.—NEW DEPARTURE DIV., GENERAL MOTORS CORP., Bristol, Conn.

265. INTERCHANGEABLE BALL BEARING FOR REPLACEMENT—Charts showing numbers used by manufacturers to identify bearing characteristics, also information on specifications.—NEW DEPARTURE DIV., GENERAL MOTORS CORP., Bristol, Conn.

269. LUBRICATION AND MAINTENANCE OF BALL AND ROLLER BEARINGS—Illustrated bulletin describing efficiencies and economies of NON-FLUID OIL for all types ball and roller bearings.—NEW YORK AND NEW JERSEY LUBRICANT CO., New York, N. Y.

270. MANHATTAN FLEXLASTICS — Illustrated booklet describing how flexlastics are used in the Manhattan and Condor line of belting and mechanical rubber goods.—MANHATTAN RUBBER DIVISION, Passaic, N. J.

271. CARDING, SPINNING AND WEAVING LUBRICATION—Informative bulletin describing advantages of NON-FLUID OIL over ordinary lubricants for the lubrication of carding, spinning and weaving machinery.—NEW YORK AND NEW JERSEY LUBRICANT CO., New York, N. Y.

272. HOUGHTON LUBRICATION CHART — Attractive chart listing lubrication recommendations for all mill departments and various textile machines.—E. F. HOUGHTON AND CO., Philadelphia, Penna.

276. SPEED CONTROL—Bulletin 20B6051G describes Texrope variable speed drives. — ALLIS-CHALMERS MFG. CO., Milwaukee 2, Wis.

277. PRECISION COMPOUND AND CHAIN DRIVE—Folder explaining more profitable operation of roving frames.—PRECISION GEAR AND MACHINE CO., Charlotte, N. C.

278. ROLLER BEARINGS—New 35-page Hyatt handbook, "Guide Lines," is a guide to the proper application of cylindrical roller bearings in machinery and equipment of all types.—HYATT BEARINGS DIV., General Motors Corp., Harrison, N. J.

279. OILITE BULLETIN—Discussion of uses of oil-cushioned, self-lubricating bearings in product design and maintenance is contained in this illustrated bulletin. A wide range of machine parts is offered.—AMPLEX DIV., CHRYSLER CORP., Detroit 31, Mich.

280. BALL BEARING PILLOW BLOCKS AND FLANGE CARTRIDGES—Folder LAK contains informative text on ball bearing pillow blocks and flange cartridges incorporating the Fafnir Wide Inner Ring Bearings suitable for new as well as replacement applications in textile machinery.—THE FAFNIR BEARING CO., New Britain, Conn.

281. MULTI-V-DRIVES—16-page bulletin on Q-D (quick detachable) heavy sheaves. Descriptive information on design, application, stock sizes, and 75,000 V-Drive combinations available.—WORTHINGTON PUMP AND MACHINERY CORPORATION, Harrison, N. J.

INSTRUMENTS, STEAM SPECIALTIES . . .

301. JOHNSON ROTARY PRESSURE JOINTS—Bulletin describing the rotary pressure joint which requires no packing, no lubrication and no adjustment, giving installation and maintenance instruction, types, sizes, dimensions and prices. — THE JOHNSON CORP., Three Rivers, Mich.

307. THERMOMETER AND PRESSURE GAUGES—Catalog 6705-R and 6706 give data on both circular and rectangular case pressure type thermometers for indicating, recording and controlling processing operations in textile industry.—BROWN INSTRUMENT COMPANY, Philadelphia, Pennsylvania.

311. PIPING POINTERS—Industrial maintenance book covering installation and handling of piping, valves, fittings. Well illustrated, practical tips. — CRANE CO., Chicago, Ill.

314. MOISTURE CONTENT CONTROL — Bulletin F-1705-1 giving details of features and benefits of moisture equipment control for slashers and textile applications. — BARBER-COLMAN CO., Rockford, Ill.

315. CONTROL INSTRUMENTS FOR TEXTILE PROCESSES—32-page illustrated booklet describing controls for such processes as slashing, dyeing, bleaching, kier boiling, drying, air-conditioning, etc. —BROWN INSTRUMENT CO., Philadelphia, Penna.

316. HYDRAULIC POWER UNITS—Literature describing hydraulic unit, motor, pump, reservoir, valving a small compact unit for operating of hydraulic calenders, presses, hydraulic controls, etc.—B. F. PERKINS & SON, INC., Holyoke, Mass.

317. POWELL VALVES FOR CORROSION RESISTANCE—20-page booklet which briefly describes and illustrates the very complete line of Powell valves available in a large variety of metals and alloys to handle all corrosive fluids—to help solve flow control problems where corrosion may be encountered.—THE WILLIAM POWELL CO., Cincinnati 22, Ohio.

320. OAKITE POWER PLANT DIGEST—A 29-page manual describing materials and methods for handling 71 cleaning, degreasing, descaling, derusting, paintstripping and related operations encountered in power plants.—OAKITE PRODUCTS, INC., New York 6, N. Y.

321. RED-RAY BURNERS — Bulletin describing use of Red-Ray Burners in preheating and partial drying to increase capacity of frame.—RED-RAY MFG. CO., New York, N. Y.

322. DIAMOND SWING JOINTS—4-page illustrated folder describing the Diamond line of ball, swing and revolving joints for use on any system handling air, gas, steam, oil, or any fluid where reflexible connection is needed. — DIAMOND METAL PRODUCTS CO., St. Louis, Mo.

323. TENTER FRAME DRYER—Illustrated folder describing the features and operating principle of newly designed, high speed tenter frame dryer.—NATIONAL DRYING MACHINERY COMPANY, Philadelphia 33, Pa.

CARDING, SPINNING, WINDING . . .

401. LUMMUS DUSTLESS, STEEL, BLENDING FEEDERS—Bulletin describing automatically closing, positively locking door on feeders to prevent overloading, choking. — ALDRICH MACHINE WORKS, Greenwood, S. C.

402. AUTOMATIC CLEANING AND OVERHEAD HANDLING FOR TEXTILE MILLS—24-page bulletin describing the American Monorail Automatic Cleaner for preventing accumulation of lint on spinning, twisting, winding and warping machines. Also for cleaning monitors and card room ceilings.—THE AMERICAN MONORAIL CO., Cleveland, Ohio.

407. CARD GRINDER INFORMATION—Folder on care of card grinders, part replacements, etc.—B. S. ROY & SONS CO., Worcester, Mass., and Greenville, South Carolina.

409. ROTO CONER—Bulletin describing Universal rotary traverse winder, known as the Roto Coner, producing open wound cones for knitting and warping; parallel tubes for package dyeing, twisting, and sale yarn.—UNIVERSAL WINDING CO., Providence, Rhode Island.

410. GETTING THE MOST FROM WINDING—Bulletin No. 118 covers the first 18 issues of this topic. Bulletin 152 covers issues 12 through 52. Informative and interesting.—UNIVERSAL WINDING COMPANY, Providence, R. I.

413. SONOCO PRODUCTS—A 60 page illustrated booklet giving description, specifications and charts of the many Sonoco products, including bobbins, cones, tubes, cork cots, roving cans, spools, rolls, etc.—SONOCO PRODUCTS CO., Hartsville, S. C.

416. THE BRIEF SAGA OF THE RING TRAVELER—An interesting history relative to the ring traveler, which is in reality the basis of the spinning frame. John Thorpe's invention of the ring traveler, the development of the spindle, and the invention of Rabeth's Bolster type spindle are covered. — NATIONAL RING TRAVELER CO., Pawtucket, R. I.

419. TEXTILE APRONS—Illustrated folder showing the steps in manufacture of genuine leather aprons for all types of long draft spinning and card room machinery.—TEXTILE APRON COMPANY, East Point, Ga.

421. AUTOMATIC WINDERS — Folder describing latest winding equipment with full automatic operation. Only one automatic head for up to 100 spindles. ABBOTT MACHINE CO., Wilton, N. H.

422. MODERN TEXTILE ROLL COVERINGS—Illustrated booklet on roll covering problems with chart on corect usages. Also data on Acotex long draft aprons.—ARMSTRONG CORK CO., Industrial Division, TEXTILE PRODUCTS SEC., Lancaster, Pa.

423. TEXTILE SHEET METAL PRODUCTS—Folder on cylinders, card screens, licker-in screens, repair work. — JENKINS METAL SHOPS, INC., Gastonia, North Carolina.

427. WINDING AND CREELING WARP YARNS—Univarsal's Bulletin No. 244 contains an interesting treatment of this subject.—UNIVERSAL WINDING COMPANY, Providence, R. I.

428. PNEUMATIC ROLL PICKER—Attractive bulletin descriptive of the "Amoskeag" roll picker that removes fly and lint from the top rolls and other drafting elements in spinning and roving frames.—M-B PRODUCTS, Detroit 26, Michigan.

430. "SLIXONICE" BEARINGS—Folder is available on this new, firctionless bearing "that never needs lubrication."—DIXON LUBRICATING SADDLE COMPANY, Bristol, R. I.

431. HYGROLIT YARN CONDITIONING SYSTEM—General description of conditioning cotton, spun rayon, woolens, worsteds for twist setting, lubrication, moisture retention.—KEARNY MANUFACTURING COMPANY, INC., Kearny, N. J.

432. PRECISION TEXTILE WINDING—Bulletin on Kidde Tension and Density Control for winding rubber cones. — WALTER KIDDE & CO., INC., Belleville, N. J.

433. AUTOMATIC TRAVELING CLEANERS—Recent issue of "Parks' Parables" on automatic cleaners for spinning, warping, twisting.—PARKS-CRAMER CO., Fitchburg, Mass., and Charlotte, N. C.

434. WINDING MACHINES—WORK LOAD CALCULATIONS—Reprints of series on winder operations from labor standpoint.—UNIVERSAL WINDING CO., Providence, R. I.

435. DOUBLE DECK TWISTERS—For accurate, high-speed twisting of silk, rayon, nylon, etc., to the finest of deniers are described in this new bulletin. Both the Jumbo (8-ounce to 16-ounce headless or take-up spool packages) and Acme (up to 10-ounce packages) machines are illustrated.—U. S. TEXTILE MACHINE CO., Scranton 8, Pa.

436. MAINTENANCE INFORMATION FOR YOUR SCOTT TESTER — Booklet containing maintenance data for calibration of Scott Testers, clamps for testers, gear-box lubrication, and recording.—SCOTT TESTERS, INC., Providence, R. I.

437. SPINDLE TAPE LACING EQUIPMENT—Circular No. 54 illustrating and describing the Clipper method of joining spindle tapes.—CLIPPER BELT LACER CO., Grand Rapids 2, Mich.

439. JUMBO DOUBLER TWISTER—Doubling and twisting in one economical operation, combining from two to twelve ends of yarn, the U. S. Acme Jumbo Doubler Twister is described and illustrated in this bulletin.—U. S. TEXTILE MACHINE CO., Scranton 8, Pa.

440. SADDLES—Leaflet showing a few of the over 400 different types of saddles for both conventional and long draft spinning and roving frames.—DIXON LUBRICATING SADDLE CO., Bristol, Rhode Island.

441. SKF BALL BEARING TENSION PULLEY FOR SPINNING FRAMES — Attractive illustrated folder outlining the value of anti-friction bearing Tension Pulleys for all types of spinning frames.—SKF INDUSTRIES, INC., Philadelphia, Pa.

443. COMPARATIVE YARN TABLE—Chart giving woolen number (cut and run system) also cotton worsted and metric system; also, Comparative Rayon Denier Yarn Table.—VICTOR RING TRAVELER CO., Providence, R. I.

444. SOL LUSTRE—Attractive illustrated booklet describing Houghton's soluble softening and conditioning oils for textile fabrics and yarns.—E. F. HOUGHTON AND CO., Philadelphia, Penna.

445. ROLLER BEARING SPINDLES—Illustrated booklet showing various types of Marquette Roller Bearing Spindles. The unique full-floating footstep bearing is pictured in cut-away views, and its advantages are described.—THE MARQUETTE METAL PRODUCTS CO., Cleveland, Ohio.

449. FOSTER BULLETIN A-95 — Describes the modern Foster Model 102 winder that eliminates ribbon wind. — FOSTER MACHINE CO., Westfield, Mass.

450. IONOTRON STATIC ELIMINATOR—A 4-page, illustrated catalog section describes a new static eliminator which operates without electric power or physical contact. There is no operating expense.—U. S. RADIUM CORP., New York 7, N. Y.

452. DEVELOPMENT IN WARP SIZING—Technical bulletin describing the successful new development of applying a warp lubricant separately from and subsequent to sizing with starch and in the same operation. This patented process involves the use of a Warp Lubricator Unit and SLIX, a new one-piece liquid sizing material.—SOUTHERN SIZING CO., Atlanta, Ga.

453. CHAPMAN STATIC NEUTRALIZER — The "how" and "why" of this unit are covered in this bulletin, plus the factors affecting successful application to cotton cards, woolen cards, and cotton drawing frames.—CHAPMAN ELECTRIC NEUTRALIZER CO., Portland, Maine.

WEAVING, SLASHING . . .

502. TEXTILE COUNTERS—Catalog T37 describing pick counters for looms, hank counters for spinning, yardage counters for cloth loom, etc.—VEEDER-ROOT, INC., Hartford, Conn.

—510. THE ROMANCE OF PRAIRIE GOLD—Attractive illustrated book which tells the story of corn and the uses of corn products in industry.—CORN PRODUCTS SALES CO., New York, N. Y.

512. BRIGHT SPOT IN THE PRODUCTION PICTURE—Folder on more loom speed through Hunt loom spreaders.—HUNT MACHINE WORKS, INC., Greenville, S. C.

513. SEYCO PENETRANTS FOR YARN CONDITIONING—Folder describing the scientifically formulated Seyco sizing. — SEYDEL-WOOLLEY & CO., Atlanta, Ga.

514. SLASHER HOODS — Pamphlet describing drip-proof slasher hoods for cotton or rayon slashers. Roof or sidewall exhaust.—WOLVERINE EQUIPMENT CO., Cambridge 42, Mass.

515. TEXTILE COUNTERS—Catalog No. 50 illustrating and describing complete line of Productimeter Loom Pick Counters; Hank Counters; Yardage, Electric and Predetermined Counters; Tachometers, etc. — DURANT MANUFACTURING CO., Milwaukee 1, Wisconsin.

516. WEAVE ROOM ACCESSORIES—Weave room accessories catalog and literature on new plastic, bronze bearing sheave, which solves a troublesome way room problem.—EMMONS LOOM HARNESS COMPANY, Laurence, Mass.

517. LOADING SYSTEM—Bulletin 417, on pneumatic loading system for Saco-Lowell slasher size box squeeze rolls, contains installation photo, features, specifications, and prices.—THE FOXBORO COMPANY, Foxboro, Mass.

518. NIAGARA TWIST-SETTER—Folder describing the revolutionary Niagara Twist-Setter which has no moving parts. The yarn is sprayed from all sides to afford maximum uniformity.—SEYDEL-WOOLLEY & CO., Atlanta, Ga.

519. WOODEN BEAM HEADS, WARPER BEAMS, AND WARPING MACHINERY FOR ALL FIBERS—62-page illustrated booklet descriptive of and giving specifications for the Allen line of beam heads, warper beams, warping machinery, stop motions and cloth rolls.—ALLEN COMPANY, New Bedford, Mass.

520. PNEUMATIC LOADING SYSTEM—Bulletin 418 contains installation photo, features, specifications and prices for pneumatic loading system for Charles B. Johnson Machine Works slasher squeeze rolls.—THE FOXBORO COMPANY, Foxboro, Mass.

521. STEEL WARP BEAMS—20 page catalog No. 45 illustrating Standard and Special Purpose Warp Beams for the weaving industry, both broadloom and narrow fabrics. Also Textile Machinery Specialties.—MILTON MACHINE WORKS, Milton, Pa.

522. STARCH STABILIZER — Leaflet describing new material to prevent jelling and to improve the cold fluidity of starch dispersions.—R. T. VANDERBILT COMPANY, New York 17, N. Y.

524. JOHNSON WARP SIZER—12 page fully illustrated booklet, describing the 7 cylinder sizer with stretch indicator and finger-tip control of stretch. A point-by-point analysis. — CHARLES B. JOHNSON MACHINE WORKS, Paterson, N. J.

525. GATES LOOM ACCESSORIES — Catalogs MRG-418, MRG-421, MRG-422 describe the advantages of lug straps, harness straps and drop box pickers made from a remarkable new material called Tex-Hide. Catalog MRG-419 describes the advantages of a new "Tractive-Rib" take-up roll covering.—GATES RUBBER CO., Denver 17, Colorado.

527. COTTON SLASHERS—Photographs and detailed information are contained in this 16-page folder which describes the new WPF&M Slasher. Also included in the folder are descriptions of three types of creels and head ends and other advanced optional equipment.—WEST POINT FOUNDRY & MACHINE COMPANY, West Point, Ga.

528. PARTS CATALOGS FOR WPF&M SLASHERS, SIZE KETTLES AND PUMPS—This 42-page illustrated catalog of parts contains exploded views and part numbers for quick identification.—WEST POINT FOUNDRY & MACHINE COMPANY, West Point, Ga.

DYEING, FINISHING, CLOTH ROOM . . .

602. ALUMINUM IN THE CHEMICAL INDUSTRY—Published by Aluminum Company of America. Seventy-eight pages. Text and illustrations covering adaptability of aluminum and aluminum alloys to chemical industry applications and characteristics governing recommended uses. — ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.

610. PROCTOR DRYING MACHINERY FOR THE TEXTILE INDUSTRY—Illustrates descriptive catalog on all types of dryers for raw stock, warps, package dyed and automatic skein yarn. Also includes Preboarding and Automatic Hoarding Machines for hosiery.—PROCTOR & SCHWARTZ, INC., Philadelphia, Pa.

611. BRUSHING AND SHEARING MACHINES—Illustrated literature on the new Hermas Brushing Machine for use light sheeting to heavy ducks; also on Hermas AV Shears.—HERMAS MACHINE CO., Hawthorne, N. J.

613. RADIANT HEAT IN TEXTILE INDUSTRY—New illustrated book on uses of radiant heat, data on fuel consumption, evaporation, etc.—RED-RAY MFG. CO., New York, N. Y.

614. STRIPS IN ROLLS—Form No. CF-642 illustrated folder showing over 25 slitters and roll winders for textile use.—CAMERON MACHINE CO., Brooklyn, New York.

616. ENGINEERING PROPERTIES OF MONEL—Technical Bulletin T-5, giving detailed information on strength and ductility, working properties, resistance to various types of corrosion and other data on Monel Metal. — INTERNATIONAL NICKEL CO., INC., New York, N. Y.

617. AUTOMATIC CONTROL SYSTEM FOR CONTINUOUS BLEACHING—Illustrated folder describing the new method of controlling the temperature, pressure, and liquid level in the continuous bleach operation.—TAYLOR INSTRUMENT COMPANIES, Rochester 1, N. Y.

619. 3 FOR 5—Illustrated folder describing features of Blickman stainless steel Dyeboxes. — S. BLICKMAN, INC., Weehawken, New Jersey.

620. DYE HOUSE VENTILATION—Pamphlet describing stainless steel exhaust systems for piece dye kettles. Equipment for stock dye houses. Tempering supply air units and controls.—WOLVERINE EQUIPMENT CO., Cambridge 42, Mass.

621. INFRA-RED RADIANT HEAT GENERATORS—Illustrated bulletins on infra-red technology and applications throughout Textile pre-drying, drying, polymerizing, printing, and other heat-processing operations. — CARBOMATIC CORPORATION, New York, N. Y.

622. FILT-R-STIL—Attractive illustrated booklet describing the FILT-R-STIL method of chemically purifying water.—AMERICAN CYANAMID & CHEMICAL CORP., New York 20, N. Y.

623. TENSION CONTROLS—Form No. C. F. 440 illustrating various types of unwind stands for use in maintaining constant tension on web. Some equipped with photo-electric side register controls.—CAMERON MACHINE CO., Brooklyn 2, N. Y.

625. BALL BEARING ROLLER TYPE SCRAY—Circular No. 904 describing this scray which is for use in handling heavy and large size rolls of cloth. This is used either in finishing plants or in the cloth room of cotton mills.—BIRCH BROS., INC., Somerville, Mass.

626. GUIDER AND GUIDING EQUIPMENT—This booklet entitled "Mount Hope Precision Guider and Guiding Equipment" describes this latest development in guiding equipment. The new guider, it is claimed, makes possible automatically controlling the lateral movement of cloth within closer limits than ever before possible.—MOUNT HOPE MACHINERY CO., Taunton, Mass.

629. ELIMINATION OF SALT HANDLING AND WASTE—Information about the Storage-Type Lixator.—INTERNATIONAL SALT CO., INC., Scranton, Pa.

630. VAT DYEING OF WOOL—Write for Calco Technical Bulletin No. 797 outlining fundamental dyeing procedures, and explaining new advances in the technology of wool dyeing and finishing.—CALCO CHEMICAL DIVISION, AMERICAN CYANAMID CO., Bound Brook, N. J.

631. THE LIXATE PROCESS—Fully illustrated booklet describing process for scientifically controlled brine operation. — INTERNATIONAL SALT CO., INC., Scranton, Pa.

633. PRINTING WITH ARIDYE PIGMENT COLORS—Bulletin F-1 describes preparation and application of pigmented water-in-oil emulsions for printing cotton, rayon, and other fabrics.—INTERCHEMICAL CORPORATION, TEXTILE COLORS DIVISION, Fair Lawn, N. J.

634. APPLICATION OF INTERCHEM ACETATE DYES—Bulletin IAD-1 describes procedures for dyeing and printing acetate rayon and nylon fabrics with new line of highly dispersed acetate dyes.—INTERCHEMICAL CORPORATION, TEXTILE COLORS DIVISION, Fair Rawn, N. J.

DYESTUFFS, CHEMICALS, SOAPS . . .

705. THEORETICAL AND APPLIED SILK-SOAKING—Attractive 28-page booklet outlining methods of silk-soaking and outlining investigation on the soaking, back-winding and degumming of silk.—HART PRODUCTS CORP., New York City.

713. LIOVATINE ED—Vat dyeing assistant increasing penetration and level dyeings with maximum yield of color.—SANDOZ CHEMICAL WORKS, New York City.

715. AQUAROL AND ARKANSAS PRODUCTS—Bulletins on Aquarol, water repellent finish with method of preparing bath; also on other Arkansas products for cotton, wool, silk and rayon, hosiery processing.—ARKANSAS CO., INC., Newark, N. J.

717. FINISH KB — Finishing compound designed as binder in combination with filling and stiffening compounds. Avoids dusting, insures draping qualities. — SANDOZ CHEMICAL WORKS, New York City.

738. LEVELENE—Booklet describing use of Levelene for leveling vat and direct colors. Also for stripping down vat colors.—AMERICAN ANILINE PRODUCTS, INC., New York, N. Y.

740. MONSANTO CHEMICALS—212 page illustrated buyers' guide for users of chemicals including useful tables, chemicals information.—MONSANTO CHEMICAL COMPANY, St. Louis, Mo.

749. LUPOMIN Q—Pamphlet outlines the application of the quaternary ammonium compound recommended for treating natural and synthetic fibres to give soft hand, lubrication, odorless finish, brighter shades, etc.—JACQUES WOLF & CO., Pasaic, N. J.

752. CAUSTIC SODA BOOK—Elibaroate 72-page text containing useful graphs, charts, diagrams and descriptive photographs designed for use of the technical men, buyers, executives, operating officials and engineers in textile mills.—COLUMBIA CHEMICAL DIVISION, PITTSBURGH PLATE GLASS CO., Pittsburgh 13, Pa.

754. THE ION EXCHANGE PRINCIPLE AND ITS APPLICATION—8-page illustrated folder illustrating the manner in which ionac and ion exchange materials are applicable to the textile field.—AMERICAN CYANAMID COMPANY, New York 20, New York.

755. LUPOMIN—Leaflet outlines the advantages of the cation active softener which is suitable for use on cotton, linen, silk, wool, synthetic fibres and mixed fabrics. A small percentage of lupomin gives a supple, smooth hand.—JACQUES WOLF & CO., Passaic, New Jersey.

758. CEGLIN—Attractive illustrated booklet describing the application of ceglin (cellulose ether) to many types of fabrics. — SYLVANIA DIVISION, AMERICAN VISCOSE CORP., New York 17, N. Y.

759. DRUCOMINE A—An effective cationic finishing agent with minimum effect upon white fabrics and upon the shade and light fastness of dyestuffs.—E. F. DREW & CO., INC., Boonton, N. J.

760. SYN-O-TROL CR — A highly concentrated, non-sulfonated cocoanut amide condensate. Recommended for all wet cleaning operations.—E. F. DREW & CO., INC., Boonton, N. J.

761. CHEMICALS FOR THE TEXTILE INDUSTRY—Attractive 30-page booklet describing uses and properties of a full line of textile chemicals.—ROHM & HAAS CO., Philadelphia, Pa.

762. ONYX TECHNICAL DATA SHEETS—Two new data sheets describing the use, advantages, and applications of Xyno Resins S 69 and Xyno Resin 362.—ONYX OIL & CHEMICAL COMPANY, Jersey City 2, N. J.

763. TRITON 770 FOR TEXTILE PROCESSING—12-page technical bulletin describing this efficient synthetic surface-active agent, with practical formulations for its application in all phases of textile wet processing.—ROHM & HAAS CO., Philadelphia, Pennsylvania.

764. GENERAL PRODUCTS LIST—20 page illustrated booklet providing complete information on Hooker chemicals and outlining the specialized Hooker processes.—HOOKER ELECTROCHEMICAL COMPANY, Niagara Falls, N. Y.

765. HOSIERY FINISHES AND FORMULAE—Attractive new booklet describes the Amalgamated line of hosiery finishes and giving numerous finishing formulae.—AMALGAMATED CHEMICAL CORPORATION, Philadelphia 34, Pa.

766. DU PONT PEROXIDE BLEACHING SYSTEMS—New book illustrating and describing this continuous peroxide bleach system. Layouts and other information included.—E. I. DU PONT DE NEMOURS & CO., ELECTROCHEMICAL DEPT., Wilmington, Dela.

767. STYMER—Booklet describing the totally new sizing and finishing agent for rayons, cottons and worsteds.—MONSANTO CHEMICAL CO., St. Louis, Mo.

768. TEXTILE CHEMICALS—Buying guide and reference book giving facts about Amalgamated Products, the fabrics on which they give best results, their proper application, and their chemical composition.—AMALGAMATED CHEMICAL CORP., Philadelphia 34, Pa.

769. SURFACE TENSION DEPRESSANT — The Booklet, "Mercerizing and Alkamerce—The Ideal Dry Mercerizing Penetrant," introduces a new product which can be used as a wetting agent, a dye leveling agent, a penetrant in package dyeing.—HART PRODUCTS CORP., New York, N. Y.

770. SPECIAL FINISHES FOR SERVICE, PROTECTION AND APPEARANCE—Contains tabulated list under following categories: Water-Repellent, Waterproof, Absorbent, Antiseptic, Flameproofing, and Fireproofing, and Character Finishes, and Moth preventives. Trade names of 140 finishes listed.—UNITED STATES TESTING CO., Hoboken, N. J.

771. "STARCH STABILIZER" — Folder on Vanesta, a product used for textile sizing and printing, discussing stabilization and the results obtained. —R. T. VANDERBILT CO., New York 17, N. Y.

772. "STANDARD SILICATE ALKALIES"—Booklet descriptive of silicate and silicated alkalies and their uses. These uses include for silk weighting, in peroxide bleaching, boiling off cotton, textile finishing, etc. — DIAMOND ALKALI COMPANY, Cleveland, Ohio.

773. TECHNICAL CHEMICAL DATA SHEETS—Complete set for dyeing, printing and finishing operations, showing major operations, performance and advantages.—ONYX OIL & CHEMICAL CO., Jersey City 2, N. J.

774. ROYCE TEXTILE CHEMICALS—This booklet briefly describes the leading Royce products for textile processing, printing, dyeing and finishing.—ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.

KNITTING . . .

801. THE WILDMAN SINGLE-HEAD FULL-FASHIONED HOSIERY MACHINE — Literature on request from the WILDMAN MFG. CO., Full-Fashioned Division, Norristown, Pa.

803. THE TUBE-TEX FOR TUBULAR KNIT GOODS—Bulletin describing this modern machine which extracts, processes, dries, conditions and folds in one continuous operation, lowering costs, saving labor, power, space and waste.—H. W. BUTTERWORTH & SONS CO., Philadelphia, Pa.

809. TEXACO IN THE KNITTING INDUSTRY—Folder on knitting mill lubricants.—THE TEXAS CO., New York, N. Y.

811. CIRCULAR KNITTING MACHINES—Interesting, informative and well illustrated in this six-page folder, just released, which describes this company's small diameter circular knitting machine.—H. BRINTON COMPANY, Philadelphia 24, Pa.

813. THE NEW REINER HIGH SPEED TRICOT MACHINE—168" or 84" knitting widths. A richly illustrated catalog describing its many novel features of construction and performance. — ROBERT REINER, INC., Weehawken, N. J.

816. THE NEW REINER KAYLOOM—A combination Knitting Weaving Loom, featured in an illustrated catalog, showing filler attachment and other important points about this machine. — ROBERT REINER, INC., Weehawken, N. J.

817. AUTOMATIC SELECTIVE STRIPING MACHINE—Descriptive and illustrative folder, entitled "If It's Stripes, Consult Brinton," now available. Important mechanisms involved in this process are described.—H. BRINTON COMPANY, Philadelphia, Pennsylvania.

818. MILTON LIGHT METAL BEAMS FOR EVERY APPLICATION — Catalog 45-A describing Light Metal Tricot Beams made in Standard and Special sizes plus Special Purpose Light Metal Textile Equipment.—MILTON MACHINE WORKS, Milton, Pa.

822. HIGH SPEED JERSEY CIRCULAR MACHINE—Completely illustrated brochure showing features and highlights of this 100 yard per hour producer. Also available—New Cylinder Chart.—SUPREME KNITTING MACHINE CO., INC., 105 Johnson Ave., New York.

827. 50% GREATER PRODUCTION claimed for the same floor space on new RPM Plain Jersey Machine; illustrated folder. — H. BRINTON CO., Philadelphia 24, Pa.

828. THE KIDDE KNITTER—Bulletin describing the newest in Raschel-type warp knitting machines and the higher production rates attained with it.—KIDDE MANUFACTURING CO., INC., Bloomfield, N. J.

SEWING MACHINES . . .

907. "FLATLOCK" MACHINE—Folder No. 902 describing, with illustrations, flat seaming operations on knit underwear, lingerie, etc. — WILLCOX & GIBBS SEWING MACHINE CO., New York, N. Y.

908. STYLE 984-112—Folder No. 836 illustrating and describing an improved Overall Bib Joining and Banding Machine.—WILLCOX & GIBBS SEWING MACHINE CO., New York, N. Y.

915. THE NEW UNION SPECIAL LOCKSTITCH MACHINE—Information of the new model which cuts production time on sewing operations is contained in Bulletin No. 258.—UNION SPECIAL MACHINE CO., Chicago 10, Ill.

MATERIALS HANDLING . . .

1001. HOW TO DETERMINE WHERE OVERHEAD MATERIALS HANDLING EQUIPMENT CAN BE USED PROFITABLY — Profusely illustrated. Gives clear, concise understanding of materials handling. Helps you to determine where and what equipment might be used to speed production and increase profits. — CLEVELAND TRAMRAIL DIV., Wickliffe, Ohio.

1002. CATALOG NO. 22—An attractive illustrated catalog describing in detail the Shamrock shipping containers and the new canvas trucks for textile use.—MEESE, INC., Madison, Ind.

1003. CASTERS AND WHEELS—192 pages, describing casters and wheels suitable for all types of industrial applications. Every mechanical engineer and purchasing agent should have this.—DARNELL CORP., LTD., Long Beach, Calif.

1006. LANE CANVAS BASKETS—16 page illustrated booklet describing the Lane line of canvas baskets for textile use.—W. T. LANE & BROTHERS, Poughkeepsie, N. Y.

1007. OVERHEAD HANDLING EQUIPMENT — 56 pages of illustrations showing successful applications of monorail systems to meet every kind of handling problem. — THE AMERICAN MONORAIL CO., Cleveland, Ohio.

1020. CONVEYORS—16-page booklet, No. 62, and entitled "Modern Time and Cost Savers," covers detailed information and illustrations on gravity rollers, wheel conveyors, supports, portable piling machines, belt conveyors, etc.—STANDARD CONVEYOR COMPANY, North St. Paul, Minn.

1022. CLEVELAND TRAMRAIL ENGINEERING AND APPLICATION DATA—Illustrated booklet with many photographs and sketches. Packed with valuable data. Covers briefly the various types of Cleveland Tramrail equipment. Delves into engineering details.—CLEVELAND TRAMRAIL DIV., Wickliffe, Ohio.

1025. CAB-OPERATED AND FLOOR-OPERATED ELECTRIC HOISTS—Bulletin No. 127 describing and illustrating electric hoists of various types and capacities. — SHEPARD NILES CRANE & HOIST CORP., Montour Falls, N. Y.

1026. HEVI-LIFT ELECTRIC HOISTS—Illustrated booklet describing the application of hoists ranging in capacity up to 15 tons in the textile industry. Gives suggested applications, detailed features and the 5-step variable speed full magnetic push-button control and seven types of mounting.—HARNISCHFEGER CORPORATION, Milwaukee 14, Wis.

1027. SINGLE BEAM CRANES—Bulletin No. 130 describing and illustrating the single beam type of overhead traveling cranes.—SHEPARD NILES CRANE AND HOIST CORP., Montour Falls, N. Y.

1028. TRAV-LIFT CRANES—Bulletin H13-1 describing P H overhead traveling crane service.—HARNISCHFEGER CORP., Milwaukee 14, Wis.

1030. C-D HOLLOW WARE—This 32-page catalog, HW44, profusely illustrated in color, shows Continental-Diamond's line of boxes, trucks, cans, barrels, baskets and trays. Complete description and specification is given on each item.—CONTINENTAL-DIAMOND FIBRE CO., Newark 38, N. J.

MISCELLANEOUS . . .

1103. UNBRAKO SCREWS — Illustrated 16-page booklet No. 570 gives data on Unbrako hollow set screws, with knurled point, self-locking features. Includes miscellaneous screw and locking nut data.—STANDARD PRESSED STEEL CO., Jenkintown, Pa.

1105. MILL NOTES—This is a mimeographed six-page pamphlet published every month containing information on new developments in process manufacturing and testing of interest to woolen and cotton mills. Mailed free to interested readers on request.—UNITED STATES TESTING CO., Hoboken, N. J.

1106. ILLUMINATED MAGNIFIER — A folder showing how Pike Flash-O-Lens is used in textile inspection; illustrated to show various models including the Pike Master Magnifier Set. — H. W. PIKE CO., Elizabeth, N. J.

1108. FABRICATION OF U. S. STAINLESS STEELS—136 page book covering use of stainless steel in textile equipment from cutting to cleaning. Includes corrosion-resistance table for chemicals.—CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh, Penn.

1109. PEERLESS FIRE PUMP—Bulletin No. B-152 illustrates both horizontal and vertical pumps for every water handling service.—PEERLESS PUMP DIV., FOOD MACHINERY CORPORATION, Los Angeles 31, Calif.

1110. DENNISON MACHINE TOOLS — 24-page catalog available which lists and illustrates this manufacturer's complete line of machine tools. Prices are included.—DENNISON MACHINE TOOL CO., INC., Hickory, N. C.

1111. BRUSHES—A 20-page booklet is now available which describes and illustrates this manufacturer's line of brushes for the textile industry.—GASTONIA BRUSH COMPANY, Gastonia, N. C.

1112. "LIGHT DUTY-LOW AIR METALLIZING GUN—Bulletin 55 describes and illustrates the economical operating features of this new metallizing gun. Operates on only 10 cu. ft. of air per minute—sprays all metals.—METALLIZING ENGINEERING COMPANY, INC., Long Island City, N. Y.

1113. FLUORESCENT INSPECTION UNIT—Data available which describes this new fixture, which employs fluorescent lamps behind a diffusing panel of flashed opal glass, with details of construction, advantages and complete specifications. — SALEM MANUFACTURING CO., Salem, Mass.

TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 5, Ga.

Please send me, without obligation, free booklets described in the November 1948 issue of TEXTILE INDUSTRIES.

(Fill in here numbers you select from all three pages) . . . . . .

. . . . . .

. . . . . .

Name . . . . . .

Firm Name . . . . . Position . . . . . .

City and State . . . . . .

Street . . . . . .

appointed superintendent of Port Leyden (N. Y.) Knitting Mill Co., succeeding **A. J. Belang,** who has retired after 35 years with the company.

Donald W. Schaffer, formerly with the Howard Hosiery Mills, Sinking Spring, Pa., is now general manager of the Pentagon Hosiery Mills, Reading, Pa., succeeding the late **Walter A. Conklin.**

George Odell, formerly with the Eastland Woolen Mill, Corinna, Me., has become overseer of weaving at the Old Colony Mfg. Co., Taunton, Mass.

George Englehardt, former superintendent of the Market Street plant of R. G. Buser Silk Corp., Paterson, N. J., is now superintendent of the Jean Ribbon Co. in that same city, succeeding **John Grieder,** resigned.

Lawrence Shaw, formerly with the Gonic Manufacturing Co., Rochester, N. H., is now overseer of finishing at Guild-Northland Mills, Laconia, N. H.

Austin J. Bailey, former vice-president of the Brookfield Mills, became associated with the Holliston Mills, Norwood, Mass., as vice-president.

Frank J. Holland has been appointed vice-president of Columbia Mills, Inc., New York.

Adam F. Mitchell, who has been with the Wilkes-Barre (Pa.) Lace Manufacturing Co., for the past 46 years, has been elected president. His most recent position was vice-president.

Francis C. Welch has been elected a director of Pepperell Mfg. Co., Boston, Mass., succeeding his father, **E. S. Welch,** deceased.

Obituaries

George H. Lanier, president of the West Point Manufacturing Company, and one of the foremost industrialists of this country, passed away in West Point, Ga., September 17, at the age of 68. He was active in textile association affairs, was interested in several businesses outside of textiles, and was a staunch supporter of the Boy Scout movement. He joined the West Point Manufacturing Company in

AN OPEN LETTER...

TO PAINT BRUSH USERS

Fuller paint brushes are 100% PURE BRISTLE. Professional painters know that pure bristle gives more yardage and does a better painting job than any other brush material. The natural wave in the individual bristles forms pockets for the paint as the bristles overlap. These reservoirs and the "flag ends" permit the paint to flow smoothly onto the surface with a minimum of brush marks. Bristles are resilient and spring back with each stroke. No "laying down" as with other brush materials. Bristle brushes will repay you many times by giving longer service and better results.

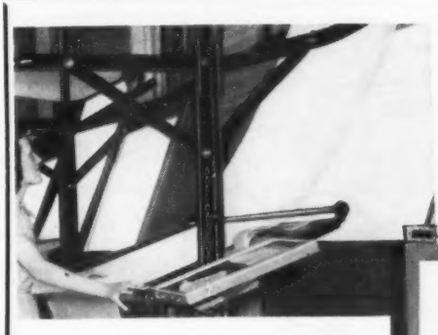
Send for booklet on how to reduce brush costs. Simply write to . . .

THE FULLER BRUSH CO.

Fuller

Telephone your Local Fuller Branch Office or write

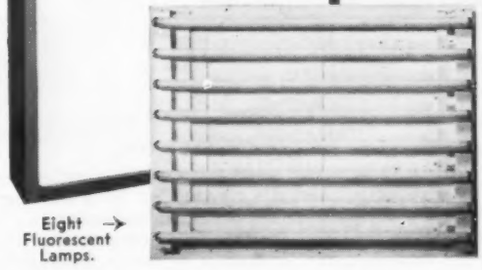
INDUSTRIAL DIVISION
3622 MAIN ST., HARTFORD 2, CONN.
In Canada: Fuller Brush Co., Ltd., Hamilton, Ont.



Inspection is
More THOROUGH
EASIER
With LESS LABOR
In LESS TIME!

Panel with ← diffusing glass.

Inspection Fixture
with cool, evenly distributed daylight quality
Fluorescent Light



Eight → Fluorescent Lamps.

A strong, durable cabinet into which are set eight 40-watt fluorescent lamps behind a diffusing glass panel*. Ample and evenly distributed light of daylight quality—not hot or glaring—permits careful, comfortable inspection of every square inch of cloth. Better than daylight, incandescent or mercury vapor because the light is cool, diffused and evenly distributed over the entire width of the cloth.

*Or in a larger size with eight 72" Slimline Fluorescent Lamps.

Salem *Manufacturing* Company

Tel. 0446 4 Jefferson Avenue, SALEM, Massachusetts

MAKERS OF FLUORESCENT AND INCANDESCENT LIGHTING FIXTURES AND WIRING DEVICES

Sterling Ring Travelers

IMPROVED

With new controlled electric furnaces and other up-to-the-minute equipment, Sterling is supplying the most uniformly tempered and distortion-free Ring Traveler possible.

COMPARE WITH STERLING

H. B. CABANISS
Box 188 Monroe, N. C.
M. H. CRANFORD
Box 204 Chester, S. C.
D. R. IVESTER
Box 882 Clarkesville, Ga.

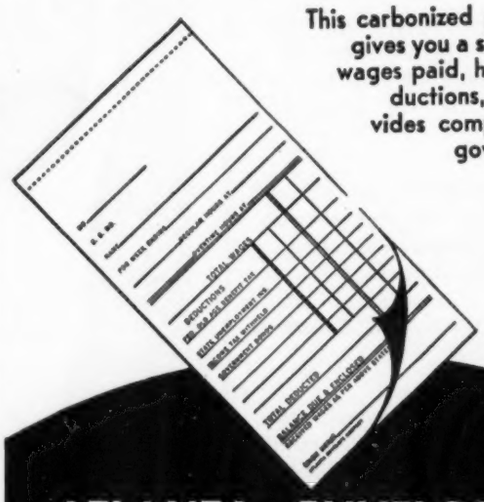
STERLING RING TRAVELER CO.
FALL RIVER, MASS.

Avoid Arguments... Take A Receipt!

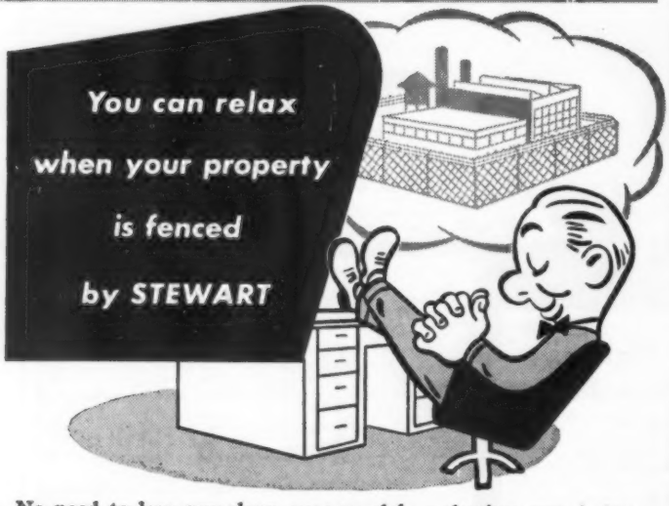
This carbonized payroll envelope gives you a signed receipt for wages paid, hours worked, deductions, etc. It also provides complete record for government payroll reports.

Take no chance—Take a receipt!

Write Today for Samples.



ATLANTA ENVELOPE CO.
BOX 1267 • ATLANTA (1) GEORGIA



No need to lose any sleep over vandals molesting your industrial property when it's surrounded by a Stewart Chain Link Wire Fence. The All Beam construction of the Stewart fence framework makes it the heaviest and strongest chain link wire fence manufactured. You may be sure a Stewart fence will give you the utmost in protection, and many extra years of dependable, low cost service. Catalog No. 83 containing complete details and specifications on all styles of Stewart Chain Link Wire and Iron Picket Fences will be sent on request.

THE STEWART IRON WORKS CO., INC., 1524 Stewart Block
Cincinnati 1, Ohio ***Experts in Metal Fabrications since 1886***

Stewart IRON and WIRE FENCES

"Draper Loom Fixing"

Is Ready for Distribution

This book of 164 pages contains all of the information and illustrations that were contained in the series of 19 articles, prepared by Ben H. Crawford and published in "Textile Industries."

Each loom motion is described in detail.

The most complete discussion of fixing looms ever published.

Offered with a three-year subscription to "Textile Industries" (either new or renewal) for five dollars. (Foreign countries $11.00)

An Entirely NEW SADDLE

That SAVES MONEY Here . . .

And MAKES MONEY Here . . .

BY FRICTIONLESS OIL-FREE DRAFTING

The new Dixon saddle* for long draft spinning *saves* money by reducing operating costs, and makes money by increasing yarn quality and production. It's an entirely new saddle featuring replaceable SLIXONICE* bearings, and the first radical improvement in saddle design in many years.

Here's how the new Dixon SLIXONICE saddle cuts costs and increases quality and production:

ELIMINATES OILING AND ROLL SCORING

REDUCES ROLL PICKING, LINT ACCUMULATION AND AVERAGE POWER CONSUMPTION

PERMITS QUICK REPLACEMENT OF WEARING SURFACES AND VARYING PRESSURES OVER A WIDE RANGE OF ROLL SPACING

Send for the illustrated booklet shown here and read more detailed information on the new Dixon SLIXONICE saddle. It can save you the money you are spending now, and make you the money you are losing now.

*Trade Mark; Pat. Applied For

DIXON
LUBRICATING SADDLE CO
Established 1876
BRISTOL — RHODE ISLAND
Sole Manufacturers of
SLIXONICE
Saddles and Cap Bar Nebs

Howard Butt, vice-president and manager of the New York office of the William Powell Co., died recently at his home in Morristown, N. J., in his 58th year.

William W. Staudt, 75, founder and treasurer of the D. S. and W. Hosiery Co., passed away last September at his home in Reading, Pa.

J. Lewis Cecco, vice-president and superintendent of Caron Spinning Co., Rochelle, Ill., died suddenly last September.

Aubrey Barker, vice-president of T. H. Barker & Co., woolen yarn mill in Gladwyne, Pa., passed away recently.

E. Lionel Parrott, executive vice-president of E. F. Drew & Co., New York, N. Y., and Boonton, N. J., was drowned recently on a weekend visit to Ashokan Reservoir.

Robert J. Keeler, 58, superintendent of Royal Spinning Mills, Lowell, Mass., died at his home in Lowell recently.

Edward J. Gallagher, secretary of the North Carolina Finishing Co., Salisbury, N. C., died recently, having suffered an attack several months ago.

William A. Grant, 86, president of Rockingham Silk Co., Newmarket, N. H., passed away recently.

Frank C. Morin, 62, president and superintendent of Belknap Mills Corp., Laconia, N. H., hosiery manufacturer, died after a short illness.

Nathaniel Farwell Ayer, 70, retired New England cotton manufacturer, died of a stroke while vacationing in New Brunswick. He was a former treasurer and director of Farwell Mills and Farwell Bleachery, Lawrence, Mass., in addition to many other important posts formerly held.

Walter A. Conklin, general manager of Pentagon Hosiery Mills, Inc., a partner in Hosiery Craftsmen, Inc., Sinking Spring, Pa., secretary of Keystone Hosiery Mfrs., Inc., and affiliated with Eska Corp., died July 10 in Stroudsburg General Hospital, Reading, Pa., following a heart attack.

Harry M. Rhett, 74, treasurer and general manager of Dallas Mills, passed away recently.

SMILIN' TEX SAYS:

"IT AIN'T BRAGGIN' IF YOU CAN PROVE IT"

In Texas we got more stuff of more different kinds to make more things than any other state.

And that's the truth. If they'd put a fence around Texas it would be more self-sufficient than any political subdivision on the face of the globe.

Here's why: you've got everything you need in your own back yard — more than plenty of lumber, iron, sulphur, salt, grapefruit, hydrocarbons, cattle, grains, poultry, etc.

But you're a textile man. All right, we've got cotton, wool, mohair and synthetics enough for Texas and surplus enough to ship all over the U. S. and all over the world.

We're centrally located in the U.S.A. and railways, highways, airways, intracoastal canals and deep water lead to every market in two hemispheres. We've got plenty of room, plenty of sunshine, plenty of pure water, plenty of friendly workers.

No State sales tax, no State income tax, but we do have a community property law. We've got plenty more resources, but space won't let us tell it.

Send for a Survey of the Texas Coast Country. On request, we will prepare for your company a carefully engineered and confidential survey of the Texas Coast Country individualized to fit your particular problem. No cost, no obligation. Address Research Department, Houston Pipe Line Company, Houston, Texas.

HOUSTON PIPE LINE CO.
Subsidiary of Houston Oil Company of Texas
GEO. A. HILL, JR., President
Wholesalers of Natural GAS

This is the Age of SPEEDS and LONG DRAFT SPINNING

Ring Travelers of greater stability are necessary. Wentworth Double Duty, Wentworth Gravity and Gravity Express meet these requirements.

Duplex Twister Travelers—Berylian Finish. Special Travelers for Silk and Rayon—National-Etartnep Finish—a new chemical treatment.

NATIONAL RING TRAVELER CO.

PAWTUCKET, R. I. **CHARLOTTE, N. C.**

SOUTHERN OFFICE—131 West First St., Charlotte, N. C.

L. Everett Taylor, General Manager, Charlotte, N. C.
H. S. Askew, Southern Agent, P. O. Box 221, Griffin, Ga.
James B. Poteet, P. O. Box 221, Griffin, Ga.
Mr. W. Harry King, P. O. Box 272, Atlanta, Ga.
Mr. J. K. Sumner, Charlotte, N. C.
Mr. Frank S. Beacham, Charlotte, N. C.
Mr. Donald C. Creech, Charlotte, N. C.

- PROCESSING METHODS
- PLANT LAYOUTS
- MATERIALS HANDLING
- MANUFACTURING CONDITIONS

CONTROLS FOR
- MACHINES
- SUPPLIES
- WASTE
- QUALITY
- MAINTENANCE

- ADMINISTRATIVE ROUTINES

WERNERTEX P. O. M. CO.

60 E. 42nd ST., NEW YORK, N. Y.

Consultants to the Textile Industry

J. E. SIRRINE CO.

GREENVILLE • SOUTH CAROLINA

Engineers

ESTABLISHED 1902

TEXTILE MILLS • RAYON PLANTS • KNITTING MILLS • DYE HOUSES
BLEACHERIES • STEAM UTILIZATION • STEAM POWER PLANTS
WATER • WASTE DISPOSAL • APPRAISALS • PLANS • REPORTS

Re-Cover Spinning Rolls This Easy Oakite Way!

"Soak rolls in fast-acting Oakite alkaline cleaner. Rinse thoroughly. Dip rolls in mild Oakite acidic solution. Tumble in sawdust."

BRIEFLY, that's the money-saving Oakite procedure for recovering steel spinning rolls. It assures a tighter, more permanent glueing job. It provides tenacious adhesion of wool covering. It means longer life for rolls. Write to us for complete, free details. No obligation. Oakite Products, Inc., 26C Thames St., New York 6, N. Y.

OAKITE

REG. U. S. PAT. OFF.

SPECIALIZED CLEANING MATERIALS • METHODS • SERVICE

Technical Representatives in Principal Cities of U. S. & Canada

LAZENBY

DH-400 SPOOLER

Designed for the winding of 4" Wilton Spools from Skein or Twister Spools, including Bit-Winding.

Special features include automatic part-spool winding and automatic stop motions at high speed operation.

Send us a small supply of your yarn and we will wind and return with Test-Wind Report and Catalog.

F. A. LAZENBY & CO.

3106 ELM AVENUE **BALTIMORE 11, MD.**

REDMAN CARD CLOTHING CO.

All Kinds of CARD CLOTHING *and* NAPPER CLOTHING

RED SPRING ROAD
ANDOVER, MASS.

Alabama Cotton Manufacturers Convene

Interesting and farsighted discussions on employee and community relations were carried out during the Alabama Cotton Manufacturers Association meeting, October 6, at the Tutwiler Hotel in Birmingham.

Dr. P. A. Auston, West Point (Ga.) Mfg. Co., in his talk, emphasized the importance of employee health and sanitary working conditions. Points of major interest that he brought out included: pre-employment and periodical examinations; foot, eye, and teeth clinics; occupational diseases; tuberculosis and venereal disease control; he also mentioned in-plant feeding facilities.

In a discussion on plant publications, J. Craig Smith of Avondale Mills suggested that only accurate material and that which is significant of company policies should be admitted into the mill paper.

Guy B. Arthur, Jr., Toccoa, Ga., proposed an open-house policy or program to further good community relations. His outline of a good program included: open-house for thought leaders, families, and students; reports to civic clubs; press releases; service and foremen clubs; and mill and community recreation.

Mr. Arthur maintained that a good foundation (be sure that the policies publicized are factual) must be built first, and then there will be no danger of backfire. He stated "Do a good job of telling what your mill is doing for the community."

Winding Machines— Principles and Practices

(*Continued from page* 213)

is mounted on a hexagonal single sleeve (A) which floats on the spindle. Roll (B) rests against the surface of the package as it builds up. As the diameter increases, roll (B) moves to the left and is so pivoted that it transmits motion through arms and connections to cause the spindle sleeve (A) to slide forward on the spindle. The parts are so made, and the leverage is such, that each stroke of the thread guide carries the yarn

It pays to combat *hidden thirst with *OASIS*-cooled water*

People feel better, work better, and think more clearly when they're *refreshed.* That's why it pays to *encourage* your employees and associates to drink more water—enough to meet their actual physical needs as well as their feeling of thirst. *Promote* healthful thirst relief with *properly cooled* water; install OASIS Electric Water Coolers where everyone has quick access to their bracing refreshment. Every OASIS is built to insure best results at lowest cost, by the world's largest maker of electric drinking water coolers. Call your OASIS dealer, listed under Water Coolers in your classified phone directory, or write us today.

OASIS
ELECTRIC WATER COOLERS

The EBCO Manufacturing Company
401 W. Town Street, Columbus 8, Ohio

*HIDDEN THIRST is *unrealized* thirst. People often *need* water before they're aware of it. Or, unless drinking water is *properly cooled,* they may drink too little to meet actual bodily needs. As a result, they may feel tired, overheated, "out of sorts." Properly cooled water, served by OASIS, invites *complete* thirst relief.

Cheaper

THAN A NEW WALL!

One coat of Carmote Mill White seals walls and other surfaces against attack by humidity, fungi, fumes and other causes of costly deterioration. Available in four finishes; durable and non-yellowing.

For assistance in solving your particular paint problems contact your regional representative or write to Carpenter-Morton Company, Department R, Everett, Mass.

CARPENTER-MORTON COMPANY

BOSTON — NEWARK — CHICAGO — DETROIT — BUFFALO

takes pleasure in announcing
an additional distributor for the South . . .
JARRETT'S Inc. Charlotte, N. C.

ALL STEEL
ECONOMY BALING PRESSES
ALL SIZES FOR ALL PURPOSES
LARGEST LINE BUILT IN U.S.A.

ECONOMY BALER CO., DEPT. C. ANN ARBOR, MICH., U.S.A.

REPRESENTATIVES:

43 Water St., New York 4, N. Y.

Drexel Bldg., Philadelphia, Pa.

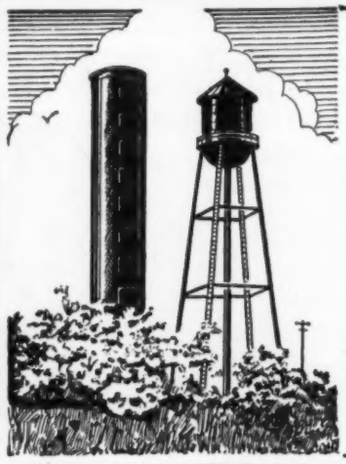
Terrell Machine Co., 1200 No. Church St., Charlotte, N. C.

170 Summer St., Boston 10, Mass.

Fletcher

TEXTILE EXTRACTORS
NARROW FABRIC LOOMS
THROWING MACHINERY

Est. 1850
FLETCHER WORKS
PHILADELPHIA 40, PENNA.



SPECIALISTS
in Tank Maintenance

. . . NO-OX-ID Coating . . . the rust preventive that lasts indefinitely.

Highly Trained Men

We Buy, Sell, Move and Recondition Tanks

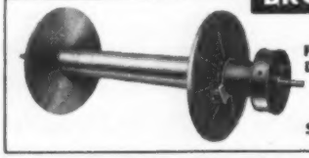
R·E·McLEAN
SINCE 1930
POST OFFICE BOX 1062
GASTONIA, N. C.

MILTON

can help end your beaming problems!

MILTON steel and light-metal beams are putting an end to beaming headaches in hundreds of mills! Whether you need standards or specials . . . Milton's 16 years' experience is at your service with an all-important tradition of long-life and low maintenance cost for every beam!

BROADLOOM BEAMS



For C & K Looms (pictured) and Draper Looms (with let-off gear).

Steel barrels, cast iron flanges.

RIBBON LOOM BEAMS

Steel barrels, with your choice of adjustable head and fixed shaft (pictured) or fixed head with removable shaft.

Write for Catalog 45 (Steel) or Catalog 45-A (Light Metal)

MILTON MACHINE WORKS
MILTON, PENNA.

Quality Shuttles

Watson-Williams shuttles have been the Textile Industry's choice since 1830.

Southern Representatives: WATSON and DESMOND, Clifton E. Watson and E. P. V. Desmond, 118½ West Fourth St., Charlotte, N. C.; John M. LITTLEFIELD, 210 Woodside Bldg., Greenville, S. C.; Walter F. DABOLL, Jefferson Bldg., Greensboro, N. C. Western Representative: Arthur J. BAHAN, P. O. Box 245, [illegible], Indiana.

Northern Representative: Guy C. BURBANK, 32 Beaconsfield Rd., Worcester 2, Mass.

WATSON-WILLIAMS MFG. CO. Millbury, Mass.

WHITTIER, WALTERS & DUPILLE
INDUSTRIAL ENGINEERS

WAGE AND JOB EVALUATIONS — APPLICATION OF IMPROVED METHODS — DEVELOPMENT OF TRAINING PROGRAMS — INSTALLATION AND MODERNIZATION OF WAGE INCENTIVES — PRODUCTION COST CONTROLS — TECHNICAL ADVICE IN LABOR RELATIONS.

CANDLER BUILDING ATLANTA, GEORGIA

Announcing

NIAPROOF

Trade-Mark

WATER-SOLUBLE

ALUMINUM ACETATE POWDER

for Water Repellent Preparations

34.5-36.2% Al_2O_3 Content

STABLE—UNIFORM

Contains only traces of Sulfates and Chlorides

We also invite your inquiries for:

COPPER ACETATE

POTASSIUM ACETATE

SODIUM ACETATE (Anhydrous)

SODIUM DIACETATE (Technical & Anhydrous)

VINYL ACETATE

ZINC ACETATE

For further information write:

NIACET

CHEMICALS DIVISION

UNITED STATES VANADIUM CORPORATION

Unit of Union Carbide and Carbon Corporation

Sales Offices

942 Niagara Building • Niagara Falls, N. Y.

against the conical surface of the spool base.

The thread guide (C), shown in more detail at the lower left of Fig. 90, is beveled on the side nearest the machine, so that, at the inner end of the traverse, the slot in the guide will lay the yarn in its proper position against the spool base.

A photograph of this attachment is reproduced in Fig. 91, which includes the measuring device, or thread meter, which is almost always used with this attachment.

(The next article in this series, No. 15, will conclude the discussion of the No. 50 machine and will cover the automatic measuring device, the quilling attachment, and the Magnetension, a recently developed magnetic tension for use in winding filament synthetic yarns.—The Editors.)

PUBLISHER'S STATEMENT

of the ownership, management, circulation, etc., required by the act of Congress of March 3, 1933, of TEXTILE INDUSTRIES, published monthly at Dalton, Ga., for October 1st, 1948.

State of Georgia, County of Fulton.

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Maynard L. Durham who, having been duly sworn according to law, deposes and says that he is the Business Manager of TEXTILE INDUSTRIES, and that the following is to the best of his knowledge and belief, a true statement for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in Section 411, Postal Laws and Regulations, printed on the reverse side of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, W. R. C. Smith Publishing Co., Atlanta, Ga.; Editor, John C. Fonville, Atlanta, Ga.; Business Manager, Maynard L. Durham, Atlanta, Ga.

2. That the owners are: W. R. C. Smith Publishipg Co., Atlanta, Ga.; Estate of W. R. C. Smith, Atlanta, Ga.; W. J. Rooke, Atlanta, Ga.; O. A. Sharpless, Atlanta, Ga.; T. W. McAllister, Atlanta, Ga.; E. W. O'brien, Atlanta, Ga.; J. C. Cook, Atlanta, Ga.; R. P. Smith, Atlanta, Ga.; Mrs. E. L. Philpot, Atlanta Ga.

3. That the known bondholders, mortgagees and other security holders, owning or holding 1 per cent or more of total amount of bonds, mortgages, or any other security holders are: None.

4. That the two paragraphs next above giving the names of the owners, stockholders and security holders if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholders or security holders appear upon the books of the company as trustees or in any other fiduciary relations, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stock holders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bonafide owner and his affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

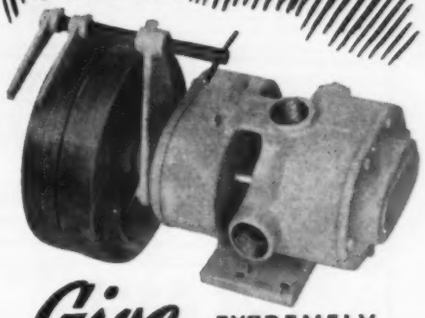
MAYNARD L. DURHAM,
Business Manager.

Sworn to and subscribed before me this 28th day of September, 1948.

SEBA J. JONES, Notary Public.
My commission expires February 19, 1950.

THOMSON PUMPS

FOR PUMPING SIZE TO YOUR SLASHERS



Give EXTREMELY SATISFACTORY SERVICE

Thomson pumps are positive rotary type. Because of the crescent shape rotors there is no metal-to-metal contact within their pumping chambers. It's a simple, efficient design and construction that means long life, dependable performance and satisfactory service.

POSITIVE ROTARY TYPE

Illustrated is the tight and loose pulley model. Capacities from 5 to 150 G.P.M. Thomson pumps are now successfully pumping size to slashers in many textile mills throughout the country.

LOW COST OPERATION

In Thomson pumps are rigid bearings, spring loaded seals and inverted rotor hub. All bearings and timing gears run in oil to assure continuous lubrication of the pump without contamination of the size and the pump lubrication.

NO JAMMING OR CLOGGING

Shaft leakage and shaft friction are reduced to a minimum by the pumps being equipped with spring loaded seals. Thomson pumps have positive volume control, self-priming and constant delivery, without agitation within the pumps.

NO METAL-TO-METAL CONTACT

SPRING LOADED SEALS

NO SHAFT LEAKAGE

NO CONTAMINATION OF SIZE

Thomson Pumps ARE AVAILABLE in Stainless Steel.

Write for complete information today.

DESIGNED AND MANUFACTURED BY EXPERIENCED Engineers

THOMSON PUMP DIVISION
WATEROUS COMPANY
ST. PAUL 1, MINN.

Waterous Dependable
SINCE 1886

CLASSIFIED ADS

BUSINESS—EMPLOYMENT—EQUIPMENT—PROFESSIONAL CARDS—OPPORTUNITIES

CLASSIFIED RATES

Rates are net, payable in advance each month. Page is 3 columns, 10 inches deep—30 inches to page. Space measured by even inch vertically by 1, 2 or 3 columns in width. Column width 2¼ inches

Transient rate for display classified, $8.00 per inch.

Contract rate for space within 12 months period as follows:

	Per Inch		Per Inch
12 inches	$7.50	48 inches	$6.75
24 inches	7.25	96 inches	6.50
36 inches	7.00	180 inches	6.00

POSITION WANTED: 10c per word per insertion; minimum charge $2.00. Cash with order. Box number address care of TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga., count as eight words. Advertisements for help wanted, equipment for sale, for rent or wanted, and professional cards are accepted at display rates only.

POSITIONS OPEN—MEN WANTED: Managers and superintendents for warp knitting mills, preferably those expert in finishing, as well as knitting; superintendent Southern print cloth mill, salary and bonus; managers and superintendents, also finishing expert on rayon and cotton fabrics; worsted and woolen cloth and yarn mill superintendents, designers, overseers and second hands; overseers dyeing and overseers finishing on rayon, acetate and cotton fabrics; overseer cotton weaving and loom fixers for South America; salesman for mill supplies for Southern states; chemical engineers and laboratory men; textile machinery draftsmen and designers; second hands for cotton weaving; card grinders, frame fixers, spindle setters, sewing machine fixers.

We invite correspondence (confidential) with mill men seeking new positions and employers seeking new personnel.

CHARLES P. RAYMOND SERVICE, INC.

294 WASHINGTON STREET Phone: Liberty 2-6547—2-6548 BOSTON 8, MASS.

Over 50 years of confidential employment service for men seeking positions and employers seeking men.

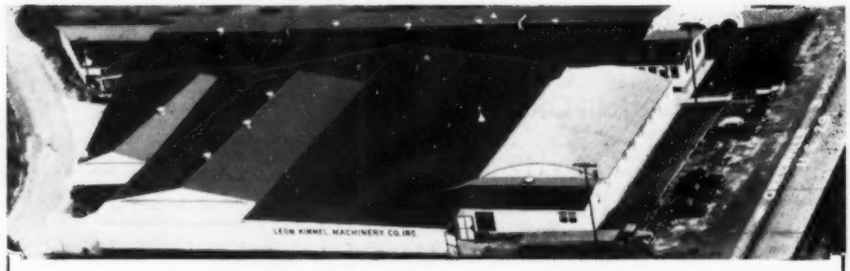
FOR SALE

2—Permick Tubular Dyeing Machines.
2—2-Roll Doublers and Combiners, 60" and 70".
4—16' Narrow Fabric Ribbon Looms.
2—Economy and Logemann auto. Balers.
4—Saco-Lowell Dolly Roll Trap Cap Twisters.
75—Wright & Sotco Loopers.
1—Hopper Bale Opener.
1—Complete Tricot Warping Unit.
1—Sargent Raw Stock Dryer, 72".
1—Cocker Ball Warper.
1—Kenyon Wool Cloth Dryer.

COMPLETE LADIES' HOSIERY PLANT.

We Make NEW Dry Cans, S.S. or Copper, any width and diameter, excellent delivery.

THE KEY TO SAVING TIME AND MONEY
CONSOLIDATED PRODUCTS COMPANY, INC.
33-41 Bergen Street
PATERSON 2, N. J.
Armory 4-6540
Have You Any Idle Equipment for Sale?



LOOM SPECIALISTS

P. O. Box 1316 — LARGEST WAREHOUSE STOCK IN THE SOUTH — We Buy, Sell or Trade Used Textile Machinery and Supplies — Phone 2-2721

LEON KIMMEL MACHINERY COMPANY

OFFICE AND WAREHOUSE: NEW SPARTANBURG HIGHWAY — GREENVILLE, S. C.

500,000 SPOOLS

All metal, new, used and re-used in good condition. Five-inch traverse, 3¾" head flanges, 1¼" core, $\frac{7}{16}$" spindle hole. Packed in fibreboard cartons, immediate delivery. Best cash offer takes lot. Samples on request. Write Box 246, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 5, Ga.

PAUL B. EATON

Patent Attorney
1208 Johnston Bldg.,
Charlotte, N. C.
753 Munsey Bldg.,
Washington, D. C.

WANTED: Assistant Overseer of Spinning large Alabama mill.

WANTED: Assistant Overseer of Carding large Alabama mill.

WANTED: Assistant Overseer of Spool, Warp, and Slashing, large Alabama mill.

Box 222, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga.

Opportunity for

SALES REPRESENTATIVE

Important manufacturer of textile chemical processing specialties offers unusually lucrative position to qualified sales representative to cover Alabama, Mississippi, Georgia, Tennessee. Practical mill background in textile dyeing and finishing essential. Good working knowledge of rayon and acetate processing desirable. State age, training, experience, references. Our organization knows of this advertisement. Box 243, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga.

JAMES E. FITZGERALD

Specializing in the Purchase and Sale of Used Textile Preparatory and Finishing Machinery.
Tel. 8-5616
10 Purchase Street, Fall River, Mass.

DYESTUFFS

Will buy your surplus and obsolete dyes and chemicals for cash.

NEW ENGLAND PRODUCTS CO.
91 Oliver St. Boston, Mass.

THE PRIVATE EMPLOYMENT SERVICE
"For The Better Applicants"
Alton Hicks, Mgr.

• Technical • Administrative
• Sales PERSONNEL

403-4 Chamber of Commerce Bldg.
MAin 8992 ATLANTA

TEXTILE AUXILIARIES

New and Used Textile Finishing Machinery and Supplies.
Home of Bulldog Expanders.
PROVIDENCE, R. I. 15 ORMSBEE AVE.
Tel. Dexter 9650 and 8837

FOR SALE

1—8' Stainless Steel Lined Cypress Dye Beck

1—5' Stainless Steel Lined Cypress Dye Beck

1—10 Fan Loop Dryer, 40' x 92" revolving poles.

Cadgene Machinery Co.

P. O. Box 1206

Paterson, N. J.

SALES REPRESENTATIVE WANTED:

Large manufacturer of skewers. Is looking for representative on commission basis, who calls on the spinning mills. Box 232, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga.

FOR SALE

Small Machine Shop Equipment:

1 small lathe 9" drop, 1 large lathe 20" drop with other equipment, drill press, grinding wheel, new set of reamers, new drills, and other items. Can be inspected in shop. Box 237, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Georgia.

SALES REPRESENTATION AVAILABLE

If you are looking for sales representation in the states of Georgia and Alabama we offer you the services of experienced textile engineers of the highest type and well known in the territory. We will consider one good account. Box 248, TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Ga.

WANTED

Draper loom fixer for cotton textile mill in South America — Experienced man required. Give complete background and experience. Box 245, TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Ga.

POSITION WANTED

As superintendent, assistant or favorable position with opportunity for advancement in small Southern plant. 15 years experience in cotton textiles, specialist in manufacturing of tobacco spread cloth. Have held positions as second hand, overseer and superintendent. Married, graduate in textiles of Georgia Tech Evening School. Also two years training in business administration. Can furnish highest type references. Desire connection with good progressive concern.

Salary secondary to opportunity. Box 250, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 5, Ga.

TEXTILE MACHINERY

TEXTILE MACHINERY

DOMESTIC - FOREIGN

LIQUIDATIONS

•

APPRAISALS

•

MILL PROPERTIES

•

John Marshall

of Fall River

315 GRANITE BLOCK P. O. BOX 815 FALL RIVER, MASS.

Telephones: 6-8217, 6-8218

H. E. LINDERSON

Textile Machinery

LIQUIDATIONS—APPRAISALS

Tel. Jackson 7075 P. O. Box 505, Providence, R. I.

35 Westminster Street

CLOTH ROOM OVERSEER WANTED

An excellent opportunity for a cloth room overseer in a South Carolina mill. Must be experienced in spun rayon and filament goods. Box 249, TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Ga.

FOR SALE

Two-roll squeezer or padder, 72" face, 13½" diameter rolls, equipped with screw and lever set frames, wooden tank stainless steel lined. Rolls recovered with new rubber. Box 247, TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Ga.

WANTED

Position as superintendent, 46 years of age, 11 years as general overseer. Last 12 years as superintendent, 8 years as superintendent of combed yarn mills, last 4 years as superintendent of weaving mills. Box No. 244, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta 5, Georgia.

WANTED—TO BUY

Five-roll rolling calender, 58" or 60" face rollers. Chas. W. Breneman Co., 2045 Reading Rd., Cincinnati 5, Ohio.

SUPERINTENDENT NEEDED

By Internationally Known Corporation

For a new modern weaving mill running on synthetics. Man should have degree in textile engineering, experience and ability in handling people, and have had experience on plain and fancy work.

Preferred age 30-45. Location of plant Georgia. Compensation commensurate with ability and experience. If interested, please reply giving the complete summary of educational and experience qualifications and present salary.

BOX 251, TEXTILE INDUSTRIES, 806 Peachtree St., N. E., Atlanta, Ga.

"The Roving Frame"

by Fay H. Martin

Every carder, frame fixer, section man, and superintendent will find "The Roving Frame," by Fay H. Martin, an instructive pamphlet. Mr. Martin, who has long written articles for "Textile Industries," clearly interprets draft, twist, lay, tension, pressure of the presser, hyperbola curve, the winding of the bobbin, reverse twist on the roving frame, roving frame cones, tensions and compounds so that the student or practical man will profit by his explanation.

This is a reprint of 26 pages 8½ x 11 of a series of articles which were previously published in "Textile Industries," containing valuable information, illustrations, tables, charts and diagrams.

Fay H. Martin is a recognized authority on the roving frame. This book has been adopted by textile schools and vocational schools. May be secured in conjunction with a 3-year subscription to "Textile Industries" for $4.50 (Foreign, $11.00).

TEXTILE INDUSTRIES

Grant Building **Atlanta 3, Georgia**

DRONSFIELDS' PATENT ATLAS BRAND EMERY FILLET

STOCKED BY
THE PRINCIPAL MILL SUPPLY HOUSES AND CARD MAKERS

KALPINOL for NYLON HOSIERY

Yarns wet with Kalpinol give a good stitch, then dry within two inches of the needles. Stitch remains set. Birdseyes or slipping of the stitch are avoided. Rolling is prevented, making seaming easier.

. . . a Kali lubricant that reduces friction on the needles and sinkers and also makes carrier tubes last longer.

For cleaning nylon size from your needles, sinkers, bits, etc., use K.N.K. (Kali Needle Kleaner). It can be used straight, or mixed with equal parts of water without separating.

ONE OF A FULL LINE OF KALI TEXTILE CHEMICALS

KALI MANUFACTURING CO.
Manufacturing Chemists
427 MOYER STREET • PHILADELPHIA 25, PA.

BARNES SERVICE *Consulting Engineers*

TO THE TEXTILE INDUSTRY FOR OVER ⅓ CENTURY

Surveys—Reorganizations—New Plant Developments for Cotton, Wool, and Synthetic Yarn and Cloth Processing, Bleaching, Dyeing, Printing and Finishing.

★ Plant Appraisals ★ Mechanical and Operating Surveys—New Methods ★ Scheduling and Planning ★ Work Load Studies, Job Analysis and Evaluation, with Incentive Plans ★ Standard Cost Installations ★ Cost Control Methods

Laborometer Burden-meter Waste-meter

SERVING THE TEXTILE INDUSTRY OF THE WORLD — BT INC. — FOR OVER A THIRD OF A CENTURY

BARNES TEXTILE ASSOCIATES, Inc.
10 HIGH STREET, BOSTON 10, MASS.
318 MONTGOMERY BLDG., SPARTANBURG, S. C.

CAMS

Our ROWBOTTOM cam cutting facilities are at your disposal for your cam requirements.

Let us have your inquiries.

BLOOMFIELD TOOL CORP.
31 FARRAND ST. **BLOOMFIELD, N. J.**

Index of ADVERTISERS

A

Abbott Machine Co. 80
Aberfoyle Mfg. Co. 198
Aldrich Machine Works 36
Allen Company 233
Allis-Chalmers Mfg. Co. 54 and 55
Althouse Chemical Co. 39
Aluminum Co. of America ... 68
Amalgamated Chemical Corp. ..154
American Air Filter Co. 20
American Aniline Products, Inc. 35
American Associated Consultants, Inc. 258
American Chain & Cable Co., Inc. ..... *
American Cyanamid Co. Industrial Chemicals ..... *
American Key Products, Inc.,.. *
American Magnesium Corp. .. 72
American Moistening Co. ..... *
American Monorail Co. 108
American Paper Tube Co. 282
American Steel & Wire Co. .. 9
American Viscose Corp. 29
American Yarn & Processing Co. 200
Amplex Mfg. Co. 65
Arguto Oilless Bearing Co. ..261
Arkansas Company, Inc. 25
Armstrong Cork Co. 148 and 149
Arnold, Hoffman & Co., Inc. ..208
Ashworth Bros., Inc. ..... *
Associated Business Papers, Inc. ..... *
Atlanta Envelope Co. 268
Atlanta Mach. Works 253
Atlanta Paper Co. 130
Atlas Electric Devices Co. ... *
Augusta Chemical Co. ..... *
Avondale Mills 200

B

Bahan Textile Mch. 120
Bahnson Co. ..... *
Barber Coleman Co. .....138, 242 and 243
Barium Reduction Corp. 278
Barnes Textile Associates Inc. 276
Best & Co., Edward H. 278
Birch Brothers, Inc. ..... *
Blickman, Inc., S. 252
Bloomfield Tool Corp. 276
Bond Co., Charles 279
Borne, Scrymser Co. 262
Brinton Co., H. ..... *
Brown Instrument Co. 142
Buffalo Forge Co. ..... *
Butterworth & Sons Co. H. W. .....112 and 260

C

Calco Chemical Division 245
Cameron Machine Co. 146
Carbide & Carbon Chemical Corp. 222
Carbomatic Corporation 256
Carborundum Co. 32
Carnegie-Illinois Steel Corp ... 9
Carpenter-Morton Co. 271
Carrier Corporation ..... *
Carter, Inc., A. B. 252
Celanese Corp. of America & Subsidiary Cos. 170
Chapman Elec. Neutralizer Co. 10
Ciba Co., Inc. ..... *
Clark Tructractor Division ...237
Classified Ads .....274 and 275
Cleveland Tramrail Division ..150
Clinton Industries, Inc. 216
Clipper Belt Lacer Co. 280
Cocker Machine & Foundry Co. 278
Cole Mfg. Co., R. D. 254
Columbia Chemical Division .. *
Columbia Steel Co. 9
Comer Machinery Co. 259
Commercial Factors Corp. .....Inside Front Cover
Continental-Diamond Fibre Co. 262
Cooper Alloy Fdry. Co. 73
Corn Products Sales Co. ..... *
Crane Company ..... *
Crompton & Knowles Loom Works 8
Crouse-Hinds Co. 52
Curtis & Marble Machine Co. . *

D

Daniels, Inc., C. R. ..... *
Darnell Corp., Ltd. 256
Dary Ring Traveler Co. ... .260
Davison Publishers 254
Dayton Rubber Mfg. Co. .....76 and 202
Denison Mach. Tool Co. 278
Diamond Metal Prod. Co. ... *
Dings Magnetic Separator Co.. *
Dixon Saddle Co. 269
Dobeckmun Co. 264
Dodge Mfg. Corp. ..... *
Dommerich & Co., L. F. 152
Draper Corporation 1
Drew & Co., E. F. 43
Dronsfield Bros., Ltd. 276
Du Pont de Nemours & Co., Inc., E. I. (Dyestuff Division) ..... *
Du Pont de Nemours & Co., Inc., E. I. (Electrochemicals Dept.) 212
Du Pont de Nemours & Co., Inc., E. I. (Finishes Div.)..231
Du Pont de Nemours & Co., (Vinyl Div.) 63
Durant Mfg. Co. ..... *

E

Ebco Mfg. Co. 271
Economy Baler Co. 272
Edmos Products Corp. 201
Emerson Apparatus Co. ..... *
Emery Industries, Inc. 64
Emmons Loom Harness Co. ... *
Eriez Mfg. Co. 15

F

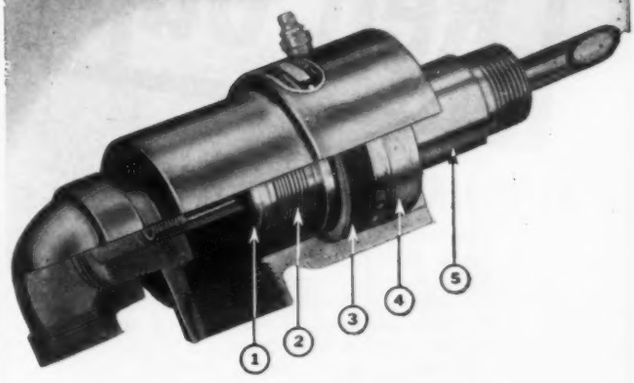
Fafnir Bearing Co. ..... *
Felters Company, The ..... *
Fidelity Machine Co. 229
Finnell System, Inc. 134
Fletcher Works 272
Ford Chain Block Div. ..... *
Foster Machine Co. 210
Foxboro Company ..... *
Franklin Process Co. ..... *
Fuller Brush Co. 267

G

Gardner-Denver Co. 14
Gastonia Brush Co. ..... *
Gates Rubber Co. 4
Gaylord Container Corp. 28

"Where Good Connections Count"

ROTARY-UNIONS



(1)—SILVER BRAZED CONSTRUCTION
(2)—BELLOWS OF HEAVY MONEL
(3)—GRAPHITE SEALING RING
(4)—BALL BEARING RADIAL THRUST
(5)—SHAFT OF HEAVY STEEL

AVAILABLE IN PIPE SIZE FROM 1/2" TO 3" IN PLAIN OR SYPHON TYPES FROM STOCK.

TRADE **ROTARY UNIONS** MARK

WILL DO A BETTER SEALING JOB ON YOUR TEXTILE EQUIPMENT—

DRYERS • CALENDERS
SLASHERS • SANFORIZERS

Write for Bulletin No. 400

PERFECTING SERVICE COMPANY

6140 Cottage Grove Ave., Chicago 37, Ill.

Agents in principal cities and Canada

ALL PURPOSE
Ball Bearing
TRADE **ROTARY UNION** MARK

● USE BARIUM'S

Red Cap

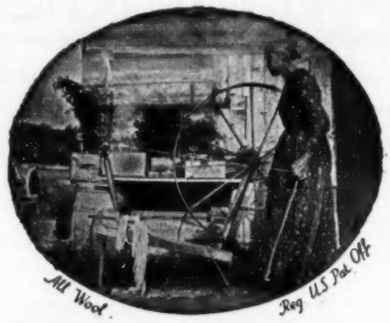
SODIUM SULPHIDE FLAKES

The analytical laboratory of a very large rayon manufacturer reported, "We examined your sodium sulphide for metallic impurities by means of the spectograph which showed it to be remarkably free from the metallic impurities which would normally be expected to be present."

The constant vigilance of our control chemists insures to you a sodium sulphide that consistently meets the most exacting specifications of the industries we serve. USE our sodium sulphide to maintain more easily your high standard of quality.

BARIUM REDUCTION CORPORATION

SOUTH CHARLESTON 3, W. VA.



KNOXALL

ROLLER, SLASHER AND CLEARER CLOTH
ENDLESS BLANKETS RAYON SLASHER JACKETS
ENDLESS REVOLVING CLEARERS

EDWARD H. BEST & CO.

Est. 1888 BOSTON, MASS. Inc. 1901

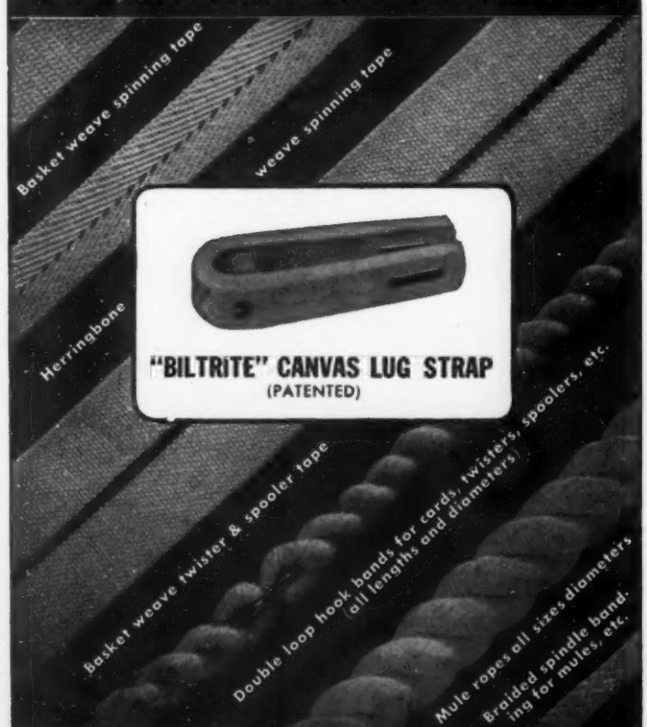
ATLANTA, GA.
W. C. HAMES
185 Pinecrest Ave., Decatur, Ga.
Dearborn 5974

NEW YORK
H. W. CURTIS
735 W. Crescent Ave., Allendale, N. J.
Allendale 1-3521

GREENVILLE, S. C.
WILLIAM J. MOORE
1 Pendleton Street
7646

LAMBETH PRODUCTS

FOR SPINNING, TWISTING, SPOOLING, WEAVING


Basket weave spinning tape
weave spinning tape
Herringbone
"BILTRITE" CANVAS LUG STRAP
(PATENTED)
Basket weave twister & spooler tape
Double loop hook bands for cards, twisters, spoolers, etc. all lengths and diameters
Mule ropes all sizes diameters
Braided spindle banding for mules, etc.

LAMBETH ROPE CORPORATION

NEW BEDFORD, MASS., U. S. A.

COCKER

MACHINE and FOUNDRY

COMPANY

GASTONIA, NORTH CAROLINA

Builders of Complete Warp Preparation Equipment

DENCO

Finest Metal Cutting Tools for Shops, Mills, and Manufacturing Plants. Special Cutting Tools of All Types and Machine Tool Designing.

Quick service resharpening your tools.

Straight fluted ... shank.

Dennison

Write for catalog and price list.

DENNISON MACHINE TOOL CO.

1300 North 22nd St. — Box 2251 — Phone 1376L — Hickory, N. C.

Index of ADVERTISERS

General Chemical Division, Allied Chemical & Dye Corp. *
General Coal Co. 258
General Dyestuff Corp. 57
General Elec. Co. .....48, 49, 144 and 145
Goodyear Tire & Rubber Co... *
Grinnell Co. 126
Gulf Oil Corp. 69

H

H & B American Machine Co. .....140 and 141
Hansen Mfg. Co. 33
Harnischfeger Corp. ..... *
Hart Products Corp. 248
Hayes Industries, Inc. 34
Henderson Fdry. & Mach. Co. Div. 30
Hermas Machine Co. 240
Hetherington & Sons, Inc. John ..... *
Hofmann & Co., Inc., Alfred .. *
Holt Harwood Co. 266
Hooker Electrochemical Co. ..226
Hotels Dinkler ..... *
Houghton & Co., E. F. 59
Houston Pipe Line Co. 269
Howard Bros. Mfg. Co. 62
Hubinger Company ..... *
Hunt Machine Works, Inc. ... 19
Hyatt Bearings Div. 60

I

Ideal Industries ..... *
Industrial Chemicals Div. .... *
Industrial Dryer Corp. 257
Ingersoll-Rand Co. 110
Interchemical Corp. (Textile Colors Div.) 157
International Nickel Co., Inc. *
International Salt Co., Inc. ... *

J

Jacobs Mfg. Co., E. H. ..... *
Jenkins Metal Shops, Inc. ...224
Jenkins Sons, Inc., M. W. ...239
Johnson Bronze Co. 12
Johnson Corp. ..... *
Johnson Machine Works, Chas. B. 281

K

Kali Mfg. Co. 276
Kaumagraph Co. 190
Keever Starch Co. 240
Kidde Mfg. Co. 188
Kidde & Co., Inc., Walter ... 61

L

Lambeth Rope Corp. 278
Lane & Bros., Inc., W. T. ...280
Laurel Soap Mfg. Co. 200
Lawlor Co., S. C. 265
Lawrence Leather Co., A. E. ..223
Lazenby & Co., F. A. 270
Lee Co., L. A. 264
Lestershire Spool & Mfg. Co. *
Loper Co., Ralph E. 200
Lunkenheimer Co. 44

M

McBride, Edward J. ..... *
McLean, R. E. 272
MacMillan Company ..... *
Maguire & Co., Inc., John P. ..175
Manhattan Rubber Division ..248
Manhattan Storage & Warehouse Co. ..... *
Marquette Metal Products Co. 82
Mathieson Chemical Corp. 78
M-B Products 280
Meadows Mfg. Co. ..... *
Medley Systems, Inc. ..... *
Meese, Inc. ..... *
Merrow Machine Co. 200
Metallizing Eng. Co., Inc. ... *
Milton Machine Works 272
Monsanto Chemical Co. 40 and 41
Moreland Chemical Co., Inc. .. *
Mt. Hope Machinery Co. 238

N

National Aniline Div. 47
National Drying Machinery Co., Inc. 244
National Plastic Prod. Co. ...123
National Ring Traveler Co. ...270
National Tube Co. 9
Neveroil Bearing Co. ..... *
New Departure Div. ..... *
New England Bobbin & Shuttle Co. ..... *
New York & New Jersey Lubricant Co. 22
Niacet Chemical Divsn. 273
Nopco Chemical Co. 26
North, Inc., Frank G. ..... *
Numo Mch. & Eng'g Co. 38

O

Oakite Products, Inc. 270
Obermaier ..... *
Old Dominion Box Co. 50
Onyx Oil & Chemical Co. ...245
Owens-Corning Fiberglas Corp. 114

P

Parks-Cramer Co. 172
Peerless Pump Div. 247
Penick & Ford, Ltd., Inc. 256
Perfecting Service Company...277
Perkins & Sons, Inc., B. F....232
Permutit Co. 124
Pike & Co., E. W. 230
Pittsburgh Plate Glass Co. (Columbia Chemical Div.).. *
Pneumafil Corporation 220
P. O. M. Company 270
Powell Co. Wm. 46
Powers Regulator Co. 51
Precision Gear & Mach. Co., Inc. .....Front Cover
Process Heating 260
Proctor & Gamble Distributing Co. ..... *
Proctor & Schwartz, Inc. ..... *

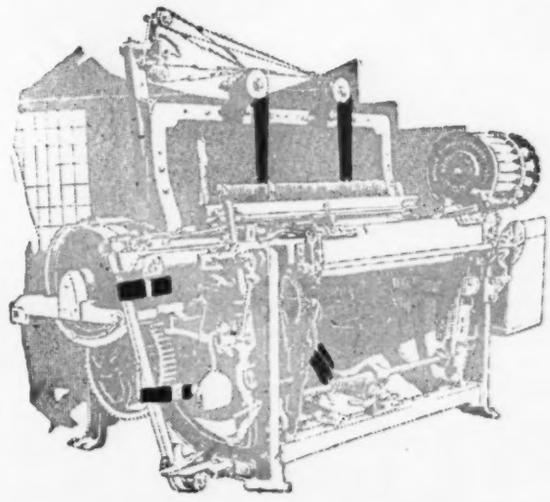
R

Raybestos-Manhattan, Inc. Manhattan Rubber Div. 248
Redman Card Clothing Co. ..270
Red Ray Mfg. Co. 266
Reeves Pulley Co. ..... *
Reiner Inc., Robert 182
Reliance Electric & Engineering Co. 13
Reynolds Metals Co. 266-A
Rhoads & Sons, J. E. 71

ORIGINAL and GENUINE
"The Leather with the Hair on"

Bondaron
REG. U. S. PAT. OFF.
TEXTILE
LEATHERS

QUALITY



LEATHER

Cut Your Loom Leather Costs In Half!

Taken individually, Textile Leathers are comparatively inexpensive items. However, when the costs of all the leathers used during the past several years are added up, and losses of time due to stoppages for replacements, cost of broken picker sticks caused by poor lugs, etc., are figured in, the total is large.

If you could cut this total IN HALF—simply by switching to "BONDARON" Leathers—wouldn't you do it?

They are only slightly higher priced than ordinary leathers, yet they consistently wear from 3 to 5 times longer. Send us a trial order today and prove them on your own looms.

THERE'S REAL ECONOMY IN STANDARDIZING ON BOND TEXTILE LEATHERS!

Bondaron, Bondural and Bondex Leather Products—

Check Straps
Lug Straps
Harness Straps
Picker Straps
Spindle Straps
Shuttle Straps
Loom Pickers
Cone Belts
Round Belting
Flat Belting
Spinner Belting
Twister Cots
Condenser Aprons
Worsted Aprons
Bunters
Picker Leathers
Apron Leathers
Belting Butts
Oak Tan Slabs
Lace Leather
Valve Leather
Back Straightenings
Pilleting Leather
English Sheep Skins
Persian Sheep Skins
English Roller Bends
English Calf Skins

Write for Booklet 202

CHARLES Bond COMPANY
617-623 ARCH STREET PHILADELPHIA, PA.
Manufacturers of Textile Leathers for Nearly Half a Century

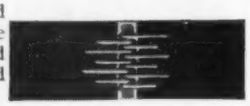
10 TIMES FASTER THAN STITCHING!

SPINDLE TAPE LACING EQUIPMENT

Lace spindle tapes 10 times faster with Clipper No. 25 Spindle Tape Hooks. Tapes can be prepared in advance so frame is shut down only long enough to place new tape on the pulleys and join ends with connecting pin. Tapes run true—last longer—run smoother—require less tension—VIBRATION IS ELIMINATED

CONDENSER TAPE LACING EQUIPMENT

Lace condenser tapes with Clipper No. 25 Condenser Tape Hooks. Clipper laced tapes, prepared in advance, can be installed in a fraction of the time required for endless tapes. Tape may be purchased in the roll at considerable saving.



CLIPPER BELT LACER COMPANY, GRAND RAPIDS 2, MICHIGAN

Clipper BELT LACING EQUIPMENT

Style 20

LANE BASKETS TRUCKS SHIPPING HAMPERS

for

Cotton Mills, Woolen Mills, Silk Mills, Hosiery Mills

Write for Catalog 130-C

W. T. LANE & BROS., Inc.
Manufacturers **Poughkeepsie, N. Y.**

M·B "AMOSKEAG" PNEUMATIC ROLL PICKER

MODEL A.V.T.
20,000 R.P.M.

This is NOT a grinder, but the original pneumatic tool especially designed for the SPECIFIC Purpose of

REMOVING LINT and FLY
from the top rolls and other parts of the drafting elements on

SPINNING FRAMES also ROVING FRAMES

Spindle design permits using PICK (which gathers the fly and lint) 3/16" diameter by 5" long when used on Spinning Frames and 3/16" diameter by 7" long when used on Roving Frames. Exhaust air directed back of roll picker to prevent fly and lint from being blown into yarn when spinning—PATENT APPLIED FOR. Special grease-sealed bearings. No lubrication required. Weight only 14 oz.

WILSON F. HURLEY.....P. O. Box 1443, Greenville, So. Car.
Virginia and South Carolina

J. W. DAVIS.....P. O. Box 745, Columbus, Ga.
Georgia, Alabama, Mississippi, Louisiana

CHARLOTTE SUPPLY CO.....Charlotte 1, No. Car.
North Carolina Representative

GEO. M. HAND, c/o Matthews Equipment Co., 509 No. 25th St., Reading, Pa. . . . N. Y., Pa., Maryland and New Jersey Representative

R. D. HUGHES SALES CO.....1812 Main St., Dallas 1, Texas
Texas, Oklahoma and Arkansas

MATTHEWS EQUIPMENT CO.....93A Broadway, Providence 3, R. I.
New England Representatives

M·B PRODUCTS
130-134 Larned St.
DETROIT 26, MICHIGAN

*WAK HANK CLOCKS

Are
Rugged — Accurate — Dependable

OVER 500 MILLS IN UNITED STATES and Foreign Countries USE WAK COUNTERS

WE BUILD—
Single—Double—Triple

PICK COUNTERS
YARDAGE COUNTERS
PICKER COUNTERS
HANK CLOCKS
ROTARY COUNTERS
SLASHER COUNTERS
SPECIAL COUNTERS

You Can Count on WAK Counters

WAK INDUSTRIES CHARLOTTE, N. C.

T.M. Reg. U. S. Patent Office

Index of ADVERTISERS

Richmond Oil, Soap & Chem. Co. 263
R. I. Humidifier & Ventilating Co. 116
Robert & Co. Associates, Inc..224
Rohm & Haas Co. ..... *
Ross Engr. Corp., J. O. ..... *
Ross Heater & Mfg. Co., Inc... 31
Roy & Sons Co., B. S. 281
Royce Chemical Co. ..Back Cover

S

Saco-Lowell Shops 6
Salem Mfg. Co. 267
Sandoz Chemical Work, Inc. .. 17
Sargent's Sons Corp., C. G....264
Schieren Co., Chas. A. 229
Scholler Bros., Inc. 203
Scholler Bros., Inc. (Schollerized Products) ... 24
Scott Testers, Inc. 236
Scott & Williams, Inc. 176
Selig Company 265
Seydel-Woolley & Co. 37
Shepard Niles Crane & Hoist Corp. ..... *
Sims Company, The 168
Sims Metal Works 63
Sinclair Refining Co., Inc. .....132 and 133
Sipp-Eastwood Corp. 236
Sirrine & Co., J. E. 270
S. K. F. Industries, Inc. .... *
Smith, Drum & Co. ..... *
Smithcraft Lighting Div. 192
Solvay Sales Division 70
Sonoco Products Co. 250
Southeastern Engineering Co. 128
Southern Sizing Co. 45
Southern States Equip. Corp... 30
Staley Mfg. Co., A. E. ..... *
Standard Brands, Inc. 75
Standard Chemical Prod., Inc.. 23
Standard Conveyor Co. ..... *
Standard-Coosa-Thatcher Co...204
Standard Fabricators, Inc. ... *
Standard Oil Company, Inc....158
Standard Pressed Steel Co....234
Steel Heddle Mfg. Co. 118
Stein, Hall & Co. ..... *
Sterling Ring Traveler Co. ...268
Stewart Iron Works, Inc. ...268
Stodghill Co. 263
Supreme Knitting Machine Co. 180
Swift & Co. ..... *
Sylvania Division, American Viscose Company ..... *

T

Taylor Instrument Cos. 166
Tennant Co., G. H. 227
Tennessee Coal, Iron and Railroad Co. 9
Tennessee Products & Chemical Corp. 11
Terrell Co. 42
Texas Co. 2
Textile Apron Co. 172
Textile Banking Co., Inc. 58
Textile Machine Works .....185 and 186
Textile Shield Co., Inc. 271
Tide-Water Associated Oil Co.. 16
Todd-Long Picker Apron Co... *
Toledo Scale Co. 241
Ton-Tex Corp. 257
Torrington Co. .....195 and 196
Truitt Mfg. Co. 246
Trust Company of Georgia...238

U

Union Special Machine Co. ... *
U. S. Bobbin & Shuttle Co. ..214
U. S. Radium Corp. 136
U. S. Rng Traveler Co. 266
U. S. Steel Corp. 9
United States Testing Co., Inc. *
U. S. Textile Mach. Co. 228
Universal Winding Co...18 and 27
Uster Corporation ..... *

V

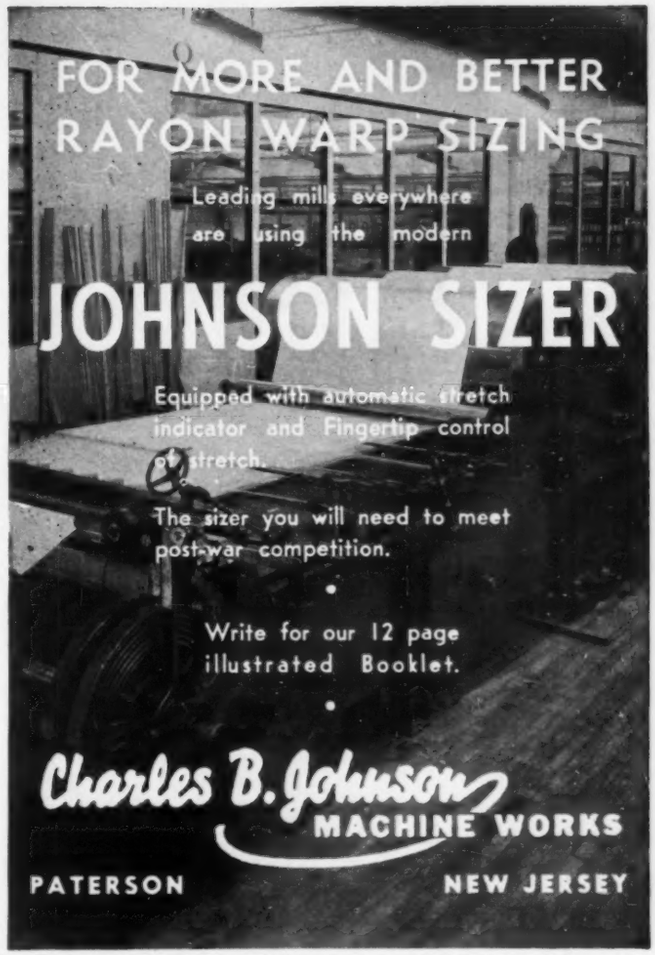
Van Vlaanderen Machine Co.. 53
Veeder-Root Inc. Inside Back Cover
Victor Ring Traveler Co. .... *

W

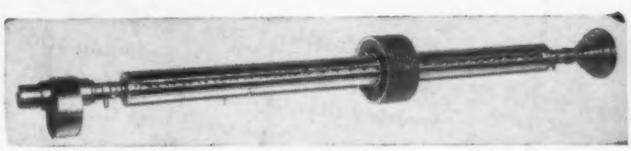
W A K Industries, Inc. 280
Wallerstein Co. Inc. 5
Walton Laboratories, Inc. 235
Want Ads .....274 and 275
Warner & Swasey Co. ..... *
Waterous Company 273
Watson & Desmond ..... *
Watson-Williams Mfg. Co. ...272
Wells Lumber Co., J. W. 216
Werner Textile Consultants...270
West Point Fdy. & Mach. Co..164
Westinghouse Electric Corp. .....66 and 67
Westinghouse Elec. Corp. (Lamps) 74
Weston Electrical Instrument Corp. 255
Whitin Machine Works 7
Whitinsville Spinning Ring Co. 262
Whitman Co., Inc., William.. *
Whittier, Walters & Dupille..272
Wicaco Machine Corp. ..... *
Wildman Mfg. Co. ..... *
Willcox & Gibbs Sewing Machine Co. 178
Wolf & Co., Jacques 162
Wolverine Equipment Co. .... *
Worthington Pump & Mchy. Co. 21
Wright Hoist Div. ..... *

Y

Yale & Towne Mfg. Co. ..... *
York Corp. 160


FOR MORE AND BETTER
RAYON WARP SIZING
Leading mills everywhere are using the modern
JOHNSON SIZER
Equipped with automatic stretch indicator and Fingertip control of stretch.
The sizer you will need to meet post-war competition.
Write for our 12 page illustrated Booklet.
Charles B. Johnson
MACHINE WORKS
PATERSON
NEW JERSEY

NEW



Two Differentials in One

ROY 40SR. For those who prefer fast grinding.

ROY 40SRS. For those who prefer regular or slower grinding.

The motion case is the same, but the gears are interchangeable. A quick switch of gears and you have your required speed—fast or slow.

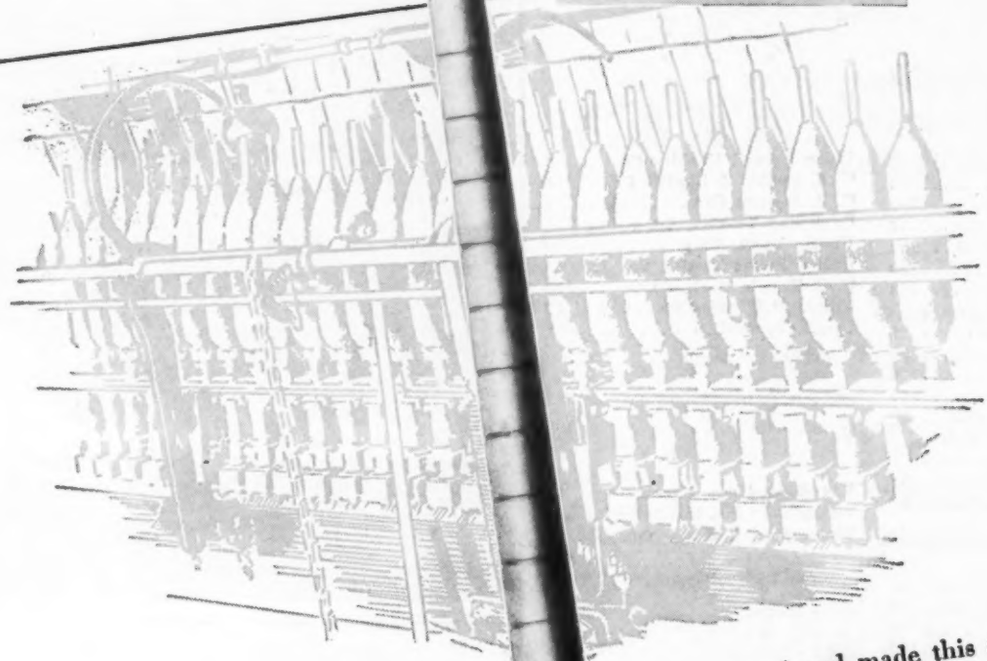
B. S. ROY & SON COMPANY
Established 1868
WORCESTER, MASS.

Representatives in the South

Charlotte, N. C.	Office and Warehouse	Tel. 5-3845
Greensboro, N. C.	Odell Mill Supply Co.	Tel. 2-2114
Charolte, N. C.	Textile Mill Supply Co.	Tel. 5125
Columbus, Ga.	J. W. Davis	Tel. 3-7055
Dallas, Tex.	Textile Supply Co.	Tel. 7-4729

A better way to do it

A-P-T- YARN CARRIERS



THIS COMPANY was established 50 years ago because the woolen and worsted industry had discovered that paper mule cops were best for their purposes in many instances. We supplied that need and every product we have made since has been made for a similar reason. If it doesn't fill a hitherto unsatisfied need, if it isn't better, we don't make it. That's why we say we don't sell just yarn carriers; we sell "a better way to do it."

The Giant Package Mule Bobbin shown here is a typical example. We designed and made this at the request of a machinery manufacturer. It called for original thinking and real engineering, because nothing like it had ever been made before. And it solved the problem so well that for years it has been standard equipment for the Giant Package Mule.

A.P.T. Yarn Carriers are now used for the spinning, twisting or weaving of all types of fibres. Perhaps they can show *you* "a better way to do it."

AMERICAN PAPER TUBE COMPANY

ESTABLISHED 1898

WOONSOCKET, R. I. GREENVILLE, S. C.

CANADIAN REPRESENTATIVE: HUGH WILLIAMS & CO., TORONTO, CANADA